

Appendices for Region 2000 Hazard Mitigation Plan Update (2013)

Section I

Appendix

Executive Summary



Appendix 1.1

Disaster Mitigation Act of 2000 Requirements



Federal Register

**Tuesday,
February 26, 2002**

Part III

Federal Emergency Management Agency

44 CFR Parts 201 and 206

**Hazard Mitigation Planning and Hazard
Mitigation Grant Program; Interim Final
Rule**

**FEDERAL EMERGENCY
MANAGEMENT AGENCY****44 CFR Parts 201 and 206****RIN 3067-AD22****Hazard Mitigation Planning and Hazard
Mitigation Grant Program****AGENCY:** Federal Emergency
Management Agency.**ACTION:** Interim final rule.

SUMMARY: This rule addresses State mitigation planning, identifies new local mitigation planning requirements, authorizes Hazard Mitigation Grant Program (HMGP) funds for planning activities, and increases the amount of HMGP funds available to States that develop a comprehensive, enhanced mitigation plan. This rule also requires that repairs or construction funded by a disaster loan or grant must be carried out in accordance with applicable standards and says that FEMA may require safe land use and construction practices as a condition of grantees receiving disaster assistance under the Stafford Act.

DATES: *Effective Date:* February 26, 2002.

Comment Date: We will accept written comments through April 29, 2002.

ADDRESSES: Please send written comments to the Rules Docket Clerk, Office of the General Counsel, Federal Emergency Management Agency, 500 C Street, SW., room 840, Washington, DC 20472, (facsimile) 202-646-4536, or (email) rules@fema.gov.

FOR FURTHER INFORMATION CONTACT: Margaret E. Lawless, Federal Insurance and Mitigation Administration, Federal Emergency Management Agency, 500 C Street, SW., Washington, DC, 20472, 202-646-3027, (facsimile) 202-646-3104, or (email) margaret.lawless@fema.gov.

SUPPLEMENTARY INFORMATION:**Introduction**

Throughout the preamble and the rule the terms "we", "our" and "us" refer to FEMA.

Section 322 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act or the Act), 42 U.S.C. 5165, enacted under § 104 the Disaster Mitigation Act of 2000, (DMA 2000) P.L. 106-390, provides new and revitalized approaches to mitigation planning. This section: (1) Continues the requirement for a Standard State Mitigation plan as a condition of disaster assistance; (2) provides for States to receive an increased

percentage of HMGP funds (from 15 to 20 percent of the total estimated eligible Federal assistance) if, at the time of the declaration of a major disaster, they have in effect a FEMA-approved Enhanced State Mitigation Plan that meets the factors listed in this rule; (3) establishes a new requirement for local mitigation plans; and (4) authorizes up to 7 percent of the HMGP funds available to a State to be used for development of State, tribal, and local mitigation plans. We will give Indian tribal governments the opportunity to fulfill the requirements of § 322 either as a grantee or a subgrantee. An Indian tribal government may choose to apply for HMGP funding directly to us and would then serve as a grantee, meeting the State level responsibilities, or it may apply through the State, meeting the local government or subgrantee responsibilities.

Section 322, in concert with other sections of the Act, provides a significant opportunity to reduce the Nation's disaster losses through mitigation planning. In addition, implementation of planned, pre-identified, cost-effective mitigation measures will streamline the disaster recovery process. The Act provides a framework for linking pre- and post-disaster mitigation planning and initiatives with public and private interests to ensure an integrated, comprehensive approach to disaster loss reduction. The language in the Act, taken as a whole, emphasizes the importance of strong State and local planning processes and comprehensive program management at the State level. The new planning criteria also support State administration of the HMGP, and contemplate a significant State commitment to mitigation activities, comprehensive State mitigation planning, and strong program management.

The planning process also provides a link between State and local mitigation programs. Both State level and local plans should address strategies for incorporating post-disaster early mitigation implementation strategies and sustainable recovery actions. We also recognize that governments are involved in a range of planning activities and that mitigation plans may be linked to or reference hazardous materials and other non-natural hazard plans. Improved mitigation planning will result in a better understanding of risks and vulnerabilities, as well as to expedite implementation of measures and activities to reduce those risks, both pre- and post-disaster.

Section 409 of the Stafford Act, 42 U.S.C. 5176, which required mitigation

plans and the use of minimum codes and standards, was repealed by the DMA 2000. These issues are now addressed in two separate sections of the law: mitigation planning is in section 322 of the Act, and minimum codes and standards are in section 323 of the Act. We previously implemented section 409 through 44 CFR Part 206, Subpart M. Since current law now distinguishes the planning from the codes and standards in separate sections, we will address them in different sections of the CFR. We address the new planning regulations in Part 201 to reflect the broader relevance of planning to all FEMA mitigation programs, while the minimum standards remain in Part 206, Federal Disaster Assistance, Subpart M. The regulations implementing the Hazard Mitigation Grant Program are in Part 206, Subpart N. This rule also contains changes to Subpart N, to reflect the new planning criteria identified in section 322 of the Act.

The administration is considering changes to FEMA's mitigation programs in the President's Budget for FY 2003. However, States and localities still would be required to have plans in effect, which meet the minimum requirements under this rule, as a condition of receiving mitigation assistance after November 1, 2003.

Implementation Strategy. States must have an approved hazard mitigation plan in order to receive Stafford Act assistance, excluding assistance provided pursuant to emergency provisions. These regulations provide criteria for the new two-tiered State mitigation plan process: Standard State Mitigation Plans, which allow a State to receive HMGP funding based on 15 percent of the total estimated eligible Stafford Act disaster assistance, and Enhanced State Mitigation Plans, which allow a State to receive HMGP funds based on 20 percent of the total estimated eligible Stafford Act disaster assistance. Enhanced State Mitigation Plans must demonstrate that the State has developed a comprehensive mitigation program, that it effectively uses available mitigation funding, and that it is capable of managing the increased funding. All State Mitigation Plans must be reviewed, revised, and re-approved by FEMA every three years. An important requirement of the legislation is that we must approve a completed enhanced plan *before* a disaster declaration, in order for the State to be eligible for the increased funding.

We will no longer require States to revise their mitigation plan after every disaster declaration, as under former

section 409 of the Act, 42 U.S.C. 5176. We recommend, however, that States consider revising their plan if a disaster or other circumstances significantly affect its mitigation priorities. States with existing mitigation plans, approved under former section 409, will continue to be eligible for the 15 percent HMGP funding until November 1, 2003, when all State mitigation plans must meet the requirements of these regulations. If State plans are not revised and approved to meet the Standard State Mitigation Plan requirements by that time, they will be ineligible for Stafford Act assistance, excluding emergency assistance.

Indian tribal governments may choose to apply directly to us for HMGP funding, and would therefore be responsible for having an approved State level mitigation plan, and would act as the grantee. If an Indian tribal government chooses to apply for HMGP grants through the State, they would be responsible for having an approved local level mitigation plan, and would serve as a subgrantee accountable to the State as grantee.

This rule also establishes local planning criteria so that these jurisdictions can actively begin the hazard mitigation planning process. This requirement is to encourage the development of comprehensive mitigation plans before disaster events. Section 322 requires local governments to have an approved local mitigation plan to be eligible to receive an HMGP project grant; however, this requirement will not fully take effect until November 1, 2003. FEMA Regional Directors may grant an exception to this requirement in extenuating circumstances. Until November 1, 2003, local governments will be able to receive HMGP project grant funds and may prepare a mitigation plan concurrently with implementation of their project grant. We anticipate that the Predisaster Mitigation program authorized by section 203 of the Act, 42 U.S.C. 5133, will also support this local mitigation planning by making funds available for the development of comprehensive local mitigation plans. Managing States that we approve under new criteria established under section 404 of the Act, 42 U.S.C. 5170c(c), as amended by section 204 of DMA 2000 will have approval authority for local mitigation plans. This provision does not apply to States that we approved under the Managing State program in effect before enactment of DMA 2000.

Our goal is for State and local governments to develop comprehensive and integrated plans that are coordinated through appropriate State,

local, and regional agencies, as well as non-governmental interest groups. To the extent feasible and practicable, we would also like to consolidate the planning requirements for different FEMA mitigation programs. This will ensure that one local plan will meet the minimum requirements for all of the different FEMA mitigation programs, such as the Flood Mitigation Assistance Program (authorized by sections 553 and 554 of the National Flood Insurance Reform Act of 1994, 42 U.S.C. 4104c and 42 U.S.C. 4104d), the Community Rating System (authorized by section 541 of the National Flood Insurance Reform Act of 1994, 42 U.S.C. 4022), the Pre-Disaster Mitigation Program (authorized by section 203 of the Stafford Act), the Hazard Mitigation Grant Program (authorized by section 404 of the Stafford Act), and the mitigation activities that are based upon the provisions of section 323 and subsections 406(b) and (e) of the Stafford Act. The mitigation plans may also serve to integrate documents and plans produced under other emergency management programs. State level plans should identify overall goals and priorities, incorporating the more specific local risk assessments, when available, and including projects identified through the local planning process.

Under section 322(d), up to 7 percent of the available HMGP funds may now be used for planning, and we encourage States to use these funds for local plan development. In a memorandum to FEMA Regional Directors dated December 21, 2000, we announced that this provision of section 322 was effective for disasters declared on or after October 30, 2000, the date on which the Disaster Mitigation Act of 2000 became law. Regional Directors are encouraging States to make these funds immediately available to local and Indian tribal governments, although the funds can be used for plan development and review at the State level as well.

As discussed earlier in this Supplementary Information, subsection 323(a) of the Stafford Act, 42 U.S.C. 5166(a), requires as a precondition to receiving disaster assistance under the Act that State and local governments, as well as eligible private nonprofit entities, must agree to carry out repair and reconstruction activities "in accordance with applicable standards of safety, decency, and sanitation and in conformity with applicable codes, specifications, and standards." In addition, that subsection authorizes the President (FEMA, by virtue of Executive Order 12148, as amended) to "require safe land use and construction practices,

after adequate consultation with appropriate State and local officials" in the course of the use of Federal disaster assistance by eligible applicants to repair and restore disaster-damaged facilities.

At the same time that we implement the planning mandates of section 322 of the Stafford Act, we are also implementing the Minimum Standards for Public and Private Structures provision of section 323 of the Act. This rule appears at Subpart M of Part 206 of Title 44 of the Code of Federal Regulations. As mentioned earlier, the section 322 planning regulations are in Part 201, while Part 206, Subpart M includes only the minimum codes and standards regulations mandated in § 323. The rule to implement § 323 of the Act reinforces the link between pre-disaster planning, building and construction standards, and post-disaster reconstruction efforts.

We encourage comments on this interim final rule, and we will make every effort to involve all interested parties prior to the development of the Final Rule.

Justification for Interim Final Rule

In general, FEMA publishes a rule for public comment before issuing a final rule, under the Administrative Procedure Act, 5 U.S.C. 533 and 44 CFR 1.12. The Administrative Procedure Act, however, provides an exception from that general rule where the agency for good cause finds the procedures for comment and response contrary to public interest. Section 322 of the Stafford Act allows States to receive increased post-disaster grant funding for projects designed to reduce future disaster losses. States will only be eligible for these increased funds if they have a FEMA-approved Enhanced State Mitigation Plan.

This interim final rule provides the criteria for development and approval of these plans, as well as criteria for local mitigation plans required by this legislation. In order for State and local governments to be positioned to receive these mitigation funds as soon as possible, these regulations must be in effect. The public benefit of this rule will be to assist States and communities assess their risks and identify activities to strengthen the larger community and the built environment in order to become less susceptible to disasters. Planning serves as the vital foundation to saving lives and protecting properties, having integrated plans in place can serve to both streamline recovery efforts and lessen potential future damages. Therefore, we believe it is contrary to the public interest to delay

the benefits of this rule. In accordance with the Administrative Procedure Act, 5 U.S.C. 553(d)(3), we find that there is good cause for the interim final rule to take effect immediately upon publication in the **Federal Register** in order to meet the needs of States and communities by identifying criteria for mitigation plans in order to reduce risks nationwide, establish criteria for minimum codes and standards in post-disaster reconstruction, and to allow States to adjust their mitigation plans to receive the increase in mitigation funding.

In addition, we believe that, under the circumstances, delaying the effective date of this rule until after the comment period would not further the public interest. Prior to this rulemaking, FEMA hosted a meeting where interested parties provided comments and suggestions on how we could implement these planning requirements. Participants in this meeting included representatives from the National Emergency Management Association, the Association of State Floodplain Managers, the National Governors' Association, the International Association of Emergency Managers, the National Association of Development Organizations, the American Public Works Association, the National League of Cities, the National Association of Counties, the National Conference of State Legislatures, the International City/County Management Association, and the Bureau of Indian Affairs. We took comments and suggestions provided at this meeting into account in developing this interim final rule. Therefore, we find that prior notice and comment on this rule would not further the public interest. We actively encourage and solicit comments on this interim final rule from interested parties, and we will consider them in preparing the final rule. For these reasons, we believe we have good cause to publish an interim final rule.

National Environmental Policy Act

44 CFR 10.8(d)(2)(ii) excludes this rule from the preparation of an environmental assessment or environmental impact statement, where the rule relates to actions that qualify for categorical exclusion under 44 CFR 10.8(d)(2)(iii), such as the development of plans under this section.

Executive Order 12866, Regulatory Planning and Review

We have prepared and reviewed this rule under the provisions of E.O. 12866, Regulatory Planning and Review. Under Executive Order 12866, 58 FR 51735, October 4, 1993, a significant regulatory

action is subject to OMB review and the requirements of the Executive Order. The Executive Order defines

"significant regulatory action" as one that is likely to result in a rule that may:

(1) Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;

(2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or

(4) Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

The purpose of this rule is to implement section 322 of the Stafford Act which addresses mitigation planning at the State, tribal, and local levels, identifies new local planning requirements, allows Hazard Mitigation Grant Program (HMGP) funds for planning activities, and increases the amount of HMGP funds available to States that develop a comprehensive, enhanced mitigation plan. The rule identifies local mitigation planning requirements before approval of project grants, and requires our approval of an Enhanced State Mitigation plan as a condition for increased mitigation funding. The rule also implements section 323 of the Stafford Act, which requires that repairs or construction funded by disaster loans or grants must comply with applicable standards and safe land use and construction practices. As such the rule itself will not have an effect on the economy of more than \$100,000,000.

Therefore, this rule is a significant regulatory action and is not an economically significant rule under Executive Order 12866. The Office of Management and Budget (OMB) has reviewed this rule under Executive Order 12866.

Executive Order 12898, Environmental Justice

Under Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, 59 FR 7629, February 16, 1994, we incorporate environmental justice into our policies and programs. The Executive Order requires each Federal agency to conduct its programs, policies, and activities that substantially affect human health or the

environment, in a manner that ensures that those programs, policies, and activities do not have the effect of excluding persons from participation in our programs, denying persons the benefits of our programs, or subjecting persons to discrimination because of their race, color, or national origin.

No action that we can anticipate under the final rule will have a disproportionately high or adverse human health and environmental effect on any segment of the population. Section 322 focuses specifically on mitigation planning to: Identify the natural hazards, risks, and vulnerabilities of areas in States, localities, and tribal areas; support development of local mitigation plans; provide for technical assistance to local and tribal governments for mitigation planning; and identify and prioritize mitigation actions that the State will support, as resources become available. Section 323 requires compliance with applicable codes and standards in repair and construction, and use of safe land use and construction standards. Accordingly, the requirements of Executive Order 12898 do not apply to this interim final rule.

Paperwork Reduction Act of 1995

As required by the Paperwork Reduction Act of 1995 (44 U.S.C. 3507(d)) and concurrent with the publication of this interim final rule, we have submitted a request for review and approval of a new collection of information, which is contained in this interim final rule. Under the Paperwork Reduction Act of 1995, a person may not be penalized for failing to comply with an information collection that does not display a currently valid Office of Management and Budget (OMB) control number. The request was submitted to OMB for approval under the emergency processing procedures in OMB regulation 5 CFR 1320.1. OMB has approved this collection of information for use through August 31, 2002, under OMB Number 3067-0297.

We expect to follow this emergency request with a request for OMB approval to continue the use of the collection of information for a term of three years. The request will be processed under OMB's normal clearance procedures in accordance with provisions of OMB regulation 5 CFR 1320.10. To help us with the timely processing of the emergency and normal clearance submissions to OMB, we invite the general public to comment on the collection of information. This notice and request for comments complies with the provisions of the Paperwork

Reduction Act of 1995 (44 U.S.C. 3506(c)(2)(A)).

Collection of Information

Title: State/Local/Tribal Hazard Mitigation Plans under Section 322 of the Disaster Mitigation Act of 2000.

Abstract: Section 322 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended by Section 104 of the Disaster Mitigation Act of 2000, provides new and revitalized approaches to mitigation planning. To obtain Federal assistance, new planning provisions require that each state, local, and tribal government prepare a hazard mitigation plan to include sections that describe the planning process, an assessment of the risks, a mitigation strategy, and identification of the plan maintenance and updating process. The Act provides a framework for linking pre- and post-disaster mitigation planning and initiatives with public and

private interests to ensure an integrated, comprehensive approach to disaster loss reduction. Under Section 322 there is a two-tiered State mitigation plan process. State mitigation plans must be reviewed, revised, and submitted to us every 3 years.

(1) A *Standard State Mitigation Plan* must be approved by us in order for States to be eligible to receive Hazard Mitigation Grant Program (HGMP) funding based on 15 percent of the total estimated eligible Federal disaster assistance. This plan demonstrates the State's goals, priorities, and commitment to reduce risks from natural hazards and serves as a guide for State and local decision makers as they commit resources to reducing the effects of natural hazards.

(2) An *Enhanced State Mitigation Plan* must be approved by us for a State to be eligible to receive HMGP funds based on 20 percent of the total

estimated eligible Federal disaster assistance. This plan must be approved by us within the 3 years prior to the current major disaster declaration. It must demonstrate that a State has developed a comprehensive mitigation program, is effectively using available mitigation funding, and is capable of managing the increased funding.

To be eligible to receive HMGP project grants, *local governments* must develop Local Mitigation Plans that include a risk assessment and mitigation strategy to reduce potential losses and target resources. Plans must be reviewed, revised, and submitted to us for approval every 5 years.

To receive HMGP project grants, *tribal governments* may apply as a grantee or subgrantee, and will be required to meet the planning requirements of a State or local government.

Estimated Total Annual Burden:

Type of collection/forms	No. of respondents	Hours per response	Annual burden hours
Update state or tribal mitigation plans (standard state mitigation plans)	18	320	5,760
State review of local plans	500 local plans	8	4,000
States develop Enhanced State Mitigation Plans	7	100	700
Local or tribal governments develop mitigation plans	500 local plans	300	150,000
Total burden			160,460

Comments: We are soliciting written comments to: (a) Evaluate whether the proposed data collection is necessary for the proper performance of the agency, including whether the information shall have practical utility; (b) evaluate the accuracy of the agency's estimate of the burden of the proposed collection of information; (c) obtain recommendations to enhance the quality, utility, and clarity of the information to be collected; and (d) evaluate the extent to which automated, electronic, mechanical, or other technological collection techniques may further reduce the respondents' burden. FEMA will accept comments through April 29, 2002.

Addressee: Interested persons should submit written comments to Muriel B. Anderson, Chief, Records Management Section, Program Services and Systems Branch, Facilities Management and Services Division, Administration and Resource Planning Directorate, Federal Emergency Management Agency, 500 C Street, Street, SW., Washington, DC 20472.

FOR FURTHER INFORMATION CONTACT: You may obtain copies of the OMB paperwork clearance package by

contacting Ms. Anderson at (202) 646-2625 (voice), (202) 646-3347 (facsimile), or by e-mail at muriel.anderson@fema.gov.

Executive Order 13132, Federalism

Executive Order 13132, Federalism, dated August 4, 1999, sets forth principles and criteria that agencies must adhere to in formulating and implementing policies that have federalism implications, that is, regulations that have substantial direct effects on the States, or on the distribution of power and responsibilities among the various levels of government. Federal agencies must closely examine the statutory authority supporting any action that would limit the policymaking discretion of the States, and to the extent practicable, must consult with State and local officials before implementing any such action.

We have reviewed this rule under E.O.13132 and have concluded that the rule does not have federalism implications as defined by the Executive Order. We have determined that the rule does not significantly affect the rights, roles, and responsibilities of States, and involves no preemption of State law nor

does it limit State policymaking discretion.

However, we have consulted with State and local officials. In order to assist us in the development of this rule, we hosted a meeting to allow interested parties an opportunity to provide their perspectives on the legislation and options for implementation of § 322. Stakeholders who attended the meeting included representatives from the National Emergency Management Association, the Association of State Floodplain Managers, the National Governors' Association, the International Association of Emergency Managers, the National Association of Development Organizations, the American Public Works Association, the National League of Cities, the National Association of Counties, the National Conference of State Legislatures, the International City/County Management Association, and the Bureau of Indian Affairs. We received valuable input from all parties at the meeting, which we took into account in the development of this rule. Additionally, we actively encourage and solicit comments on this interim final rule from interested parties, and we will

consider them in preparing the final rule.

Executive Order 13175, Consultation and Coordination With Indian Tribal Governments

We have reviewed this interim final rule under Executive Order 13175, which became effective on February 6, 2001. Under the Hazard Mitigation Grant Program (HMGP), Indian tribal governments will have the option to apply for grants directly to us and to serve as "grantee", carrying out "State" roles. If they choose this option, tribal governments may submit either a State-level Standard Mitigation Plan for the 15 percent HMGP funding or a State-level Enhanced Mitigation Plan for 20 percent HMGP funding. In either case, Indian tribal governments would be able to spend up to 7 percent of those funds on planning. Before developing this rule, we met with representatives from State and local governments and the Bureau of Indian Affairs, to discuss the new planning opportunities and requirements of § 322 of the Stafford Act. We received valuable input from all parties, which helped us to develop this interim final rule.

In reviewing the interim final rule, we find that it does not have "tribal implications" as defined in Executive Order 13175 because it will not have a substantial direct effect on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes. Moreover, the interim final rule does not impose substantial direct compliance costs on tribal governments, nor does it preempt tribal law, impair treaty rights or limit the self-governing powers of tribal governments.

Congressional Review of Agency Rulemaking

We have sent this interim final rule to the Congress and to the General Accounting Office under the Congressional Review of Agency Rulemaking Act, Public Law 104-121. The rule is a not "major rule" within the meaning of that Act. It is an administrative action in support of normal day-to-day mitigation planning activities required by section 322 and compliance under section 323 of the Stafford Act, as enacted in DMA 2000.

The rule will not result in a major increase in costs or prices for consumers, individual industries, Federal, State, or local government agencies, or geographic regions. It will not have "significant adverse effects" on competition, employment, investment,

productivity, innovation, or on the ability of United States-based enterprises to compete with foreign-based enterprises. This final rule is subject to the information collection requirements of the Paperwork Reduction Act, and OMB has assigned Control No. 3067-0297. The rule is not an unfunded Federal mandate within the meaning of the Unfunded Mandates Reform Act of 1995, Public Law 104-4, and any enforceable duties that we impose are a condition of Federal assistance or a duty arising from participation in a voluntary Federal program.

List of Subjects in 44 CFR Part 201 and Part 206

Administrative practice and procedure, Disaster assistance, Grant programs, Mitigation planning, Reporting and recordkeeping requirements.

Accordingly, Amend 44 CFR, Subchapter D—Disaster Assistance, as follows:

1. Add Part 201 to read as follows:

PART 201—MITIGATION PLANNING

Sec.

- 201.1 Purpose.
- 201.2 Definitions.
- 201.3 Responsibilities.
- 201.4 Standard State Mitigation Plans.
- 201.5 Enhanced State Mitigation Plans.
- 201.6 Local Mitigation Plans.

Authority: Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. 5121-5206; Reorganization Plan No. 3 of 1978, 43 FR 41943, 3 CFR, 1978 Comp., p. 329; E.O. 12127, 44 FR 19367, 3 CFR, 1979 Comp., p. 376; E.O. 12148, 44 FR 43239, 3 CFR, 1979 Comp., p. 412; and E.O. 12673, 54 FR 12571, 3 CFR, 1989 Comp., p. 214.

§ 201.1 Purpose.

(a) The purpose of this part is to provide information on the policies and procedures for mitigation planning as required by the provisions of section 322 of the Stafford Act, 42 U.S.C. 5165.

(b) The purpose of mitigation planning is for State, local, and Indian tribal governments to identify the natural hazards that impact them, to identify actions and activities to reduce any losses from those hazards, and to establish a coordinated process to implement the plan, taking advantage of a wide range of resources.

§ 201.2 Definitions.

Grantee means the government to which a grant is awarded, which is accountable for the use of the funds provided. The grantee is the entire legal entity even if only a particular component of the entity is designated in the grant award document. Generally,

the State is the grantee. However, after a declaration, an Indian tribal government may choose to be a grantee, or may act as a subgrantee under the State. An Indian tribal government acting as grantee will assume the responsibilities of a "state", as described in this part, for the purposes of administering the grant.

Hazard mitigation means any sustained action taken to reduce or eliminate the long-term risk to human life and property from hazards.

Hazard Mitigation Grant Program means the program authorized under section 404 of the Stafford Act, 42 U.S.C. 5170c and implemented at 44 CFR Part 206, Subpart N, which authorizes funding for certain mitigation measures identified through the evaluation of natural hazards conducted under section 322 of the Stafford Act 42 U.S.C. 5165.

Indian tribal government means any Federally recognized governing body of an Indian or Alaska Native tribe, band, nation, pueblo, village, or community that the Secretary of Interior acknowledges to exist as an Indian tribe under the Federally Recognized Tribe List Act of 1994, 25 U.S.C. 479a. This does not include Alaska Native corporations, the ownership of which is vested in private individuals.

Local government is any county, municipality, city, town, township, public authority, school district, special district, intrastate district, council of governments (regardless of whether the council of governments is incorporated as a nonprofit corporation under State law), regional or interstate government entity, or agency or instrumentality of a local government; any Indian tribe or authorized tribal organization, or Alaska Native village or organization; and any rural community, unincorporated town or village, or other public entity.

Managing State means a State to which FEMA has delegated the authority to administer and manage the HMGP under the criteria established by FEMA pursuant to 42 U.S.C. 5170c(c). FEMA may also delegate authority to tribal governments to administer and manage the HMGP as a Managing State.

Regional Director is a director of a regional office of FEMA, or his/her designated representative.

Small and impoverished communities means a community of 3,000 or fewer individuals that is identified by the State as a rural community, and is not a remote area within the corporate boundaries of a larger city; is economically disadvantaged, by having an average per capita annual income of residents not exceeding 80 percent of national, per capita income, based on

best available data; the local unemployment rate exceeds by one percentage point or more, the most recently reported, average yearly national unemployment rate; and any other factors identified in the State Plan in which the community is located.

The Stafford Act refers to the Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93-288, as amended (42 U.S.C. 5121-5206).

State is any State of the United States, the District of Columbia, Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands.

State Hazard Mitigation Officer is the official representative of State government who is the primary point of contact with FEMA, other Federal agencies, and local governments in mitigation planning and implementation of mitigation programs and activities required under the Stafford Act.

Subgrantee means the government or other legal entity to which a subgrant is awarded and which is accountable to the grantee for the use of the funds provided. Subgrantees can be a State agency, local government, private non-profit organizations, or Indian tribal government. Indian tribal governments acting as a subgrantee are accountable to the State grantee.

§ 201.3 Responsibilities.

(a) *General.* This section identifies the key responsibilities of FEMA, States, and local/tribal governments in carrying out section 322 of the Stafford Act, 42 U.S.C. 5165.

(b) *FEMA.* The key responsibilities of the Regional Director are to:

(1) Oversee all FEMA related pre- and post-disaster hazard mitigation programs and activities;

(2) Provide technical assistance and training to State, local, and Indian tribal governments regarding the mitigation planning process;

(3) Review and approve all Standard and Enhanced State Mitigation Plans;

(4) Review and approve all local mitigation plans, unless that authority has been delegated to the State in accordance with § 201.6(d);

(5) Conduct reviews, at least once every three years, of State mitigation activities, plans, and programs to ensure that mitigation commitments are fulfilled, and when necessary, take action, including recovery of funds or denial of future funds, if mitigation commitments are not fulfilled.

(c) *State.* The key responsibilities of the State are to coordinate all State and

local activities relating to hazard evaluation and mitigation and to:

(1) Prepare and submit to FEMA a Standard State Mitigation Plan following the criteria established in § 201.4 as a condition of receiving Stafford Act assistance (except emergency assistance).

(2) In order to be considered for the 20 percent HMGP funding, prepare and submit an Enhanced State Mitigation Plan in accordance with § 201.5, which must be reviewed and updated, if necessary, every three years from the date of the approval of the previous plan.

(3) At a minimum, review and, if necessary, update the Standard State Mitigation Plan by November 1, 2003 and every three years from the date of the approval of the previous plan in order to continue program eligibility.

(4) Make available the use of up to the 7 percent of HMGP funding for planning in accordance with § 206.434.

(5) Provide technical assistance and training to local governments to assist them in applying for HMGP planning grants, and in developing local mitigation plans.

(6) For Managing States that have been approved under the criteria established by FEMA pursuant to 42 U.S.C. 5170c(c), review and approve local mitigation plans in accordance with § 201.6(d).

(d) *Local governments.* The key responsibilities of local governments are to:

(1) Prepare and adopt a jurisdiction-wide natural hazard mitigation plan as a condition of receiving project grant funds under the HMGP, in accordance with § 201.6.

(2) At a minimum, review and, if necessary, update the local mitigation plan every five years from date of plan approval to continue program eligibility.

(e) *Indian tribal governments.* Indian tribal governments will be given the option of applying directly to us for Hazard Mitigation Grant Program funding, or they may choose to apply through the State. If they apply directly to us, they will assume the responsibilities of the State, or grantee, and if they apply through the State, they will assume the responsibilities of the local government, or subgrantee.

§ 201.4 Standard State Mitigation Plans.

(a) *Plan requirement.* By November 1, 2003, States must have an approved Standard State Mitigation plan meeting the requirements of this section, in order to receive assistance under the Stafford Act, although assistance authorized under disasters declared prior to November 1, 2003 will continue

to be made available. In any case, emergency assistance provided under 42 U.S.C. 5170a, 5170b, 5173, 5174, 5177, 5179, 5180, 5182, 5183, 5184, 5192 will not be affected. The mitigation plan is the demonstration of the State's commitment to reduce risks from natural hazards and serves as a guide for State decision makers as they commit resources to reducing the effects of natural hazards. States may choose to include the requirements of the HMGP Administrative Plan in their mitigation plan.

(b) *Planning process.* An effective planning process is essential in developing and maintaining a good plan. The mitigation planning process should include coordination with other State agencies, appropriate Federal agencies, interested groups, and be integrated to the extent possible with other ongoing State planning efforts as well as other FEMA mitigation programs and initiatives.

(c) *Plan content.* To be effective the plan must include the following elements:

(1) Description of the *planning process* used to develop the plan, including how it was prepared, who was involved in the process, and how other agencies participated.

(2) *Risk assessments* that provide the factual basis for activities proposed in the strategy portion of the mitigation plan. Statewide risk assessments must characterize and analyze natural hazards and risks to provide a statewide overview. This overview will allow the State to compare potential losses throughout the State and to determine their priorities for implementing mitigation measures under the strategy, and to prioritize jurisdictions for receiving technical and financial support in developing more detailed local risk and vulnerability assessments. The risk assessment shall include the following:

(i) An overview of the type and location of all natural hazards that can affect the State, including information on previous occurrences of hazard events, as well as the probability of future hazard events, using maps where appropriate;

(ii) An overview and analysis of the State's vulnerability to the hazards described in this paragraph (c)(2), based on estimates provided in local risk assessments as well as the State risk assessment. The State shall describe vulnerability in terms of the jurisdictions most threatened by the identified hazards, and most vulnerable to damage and loss associated with hazard events. State owned critical or operated facilities located in the

identified hazard areas shall also be addressed;

(iii) An overview and analysis of potential losses to the identified vulnerable structures, based on estimates provided in local risk assessments as well as the State risk assessment. The State shall estimate the potential dollar losses to State owned or operated buildings, infrastructure, and critical facilities located in the identified hazard areas.

(3) A *Mitigation Strategy* that provides the State's blueprint for reducing the losses identified in the risk assessment. This section shall include:

(i) A description of State goals to guide the selection of activities to mitigate and reduce potential losses.

(ii) A discussion of the State's pre- and post-disaster hazard management policies, programs, and capabilities to mitigate the hazards in the area, including: an evaluation of State laws, regulations, policies, and programs related to hazard mitigation as well as to development in hazard-prone areas; a discussion of State funding capabilities for hazard mitigation projects; and a general description and analysis of the effectiveness of local mitigation policies, programs, and capabilities.

(iii) An identification, evaluation, and prioritization of cost-effective, environmentally sound, and technically feasible mitigation actions and activities the State is considering and an explanation of how each activity contributes to the overall mitigation strategy. This section should be linked to local plans, where specific local actions and projects are identified.

(iv) Identification of current and potential sources of Federal, State, local, or private funding to implement mitigation activities.

(4) A section on the *Coordination of Local Mitigation Planning* that includes the following:

(i) A description of the State process to support, through funding and technical assistance, the development of local mitigation plans.

(ii) A description of the State process and timeframe by which the local plans will be reviewed, coordinated, and linked to the State Mitigation Plan.

(iii) Criteria for prioritizing communities and local jurisdictions that would receive planning and project grants under available funding programs, which should include consideration for communities with the highest risks, repetitive loss properties, and most intense development pressures. Further, that for non-planning grants, a principal criterion for prioritizing grants shall be the extent to which benefits are maximized according

to a cost benefit review of proposed projects and their associated costs.

(5) A *Plan Maintenance Process* that includes:

(i) An established method and schedule for monitoring, evaluating, and updating the plan.

(ii) A system for monitoring implementation of mitigation measures and project closeouts.

(iii) A system for reviewing progress on achieving goals as well as activities and projects identified in the Mitigation Strategy.

(6) A *Plan Adoption Process*. The plan must be formally adopted by the State prior to submittal to us for final review and approval.

(7) *Assurances*. The plan must include assurances that the State will comply with all applicable Federal statutes and regulations in effect with respect to the periods for which it receives grant funding, in compliance with 44 CFR 13.11(c). The State will amend its plan whenever necessary to reflect changes in State or Federal laws and statutes as required in 44 CFR 13.11(d).

(d) *Review and updates*. Plan must be reviewed and revised to reflect changes in development, progress in statewide mitigation efforts, and changes in priorities and resubmitted for approval to the appropriate Regional Director every three years. The Regional review will be completed within 45 days after receipt from the State, whenever possible. We also encourage a State to review its plan in the post-disaster timeframe to reflect changing priorities, but it is not required.

§ 201.5 Enhanced State Mitigation Plans.

(a) A State with a FEMA approved Enhanced State Mitigation Plan at the time of a disaster declaration is eligible to receive increased funds under the HMGP, based on twenty percent of the total estimated eligible Stafford Act disaster assistance. The Enhanced State Mitigation Plan must demonstrate that a State has developed a comprehensive mitigation program, that the State effectively uses available mitigation funding, and that it is capable of managing the increased funding. In order for the State to be eligible for the 20 percent HMGP funding, FEMA must have approved the plan within three years prior to the disaster declaration.

(b) Enhanced State Mitigation Plans must include all elements of the Standard State Mitigation Plan identified in § 201.4, as well as document the following:

(1) Demonstration that the plan is integrated to the extent practicable with other State and/or regional planning

initiatives (comprehensive, growth management, economic development, capital improvement, land development, and/or emergency management plans) and FEMA mitigation programs and initiatives that provide guidance to State and regional agencies.

(2) Documentation of the State's project implementation capability, identifying and demonstrating the ability to implement the plan, including:

(i) Established eligibility criteria for multi-hazard mitigation measures.

(ii) A system to determine the cost effectiveness of mitigation measures, consistent with OMB Circular A-94, Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs, and to rank the measures according to the State's eligibility criteria.

(iii) Demonstration that the State has the capability to effectively manage the HMGP as well as other mitigation grant programs, including a record of the following:

(A) Meeting HMGP and other mitigation grant application timeframes and submitting complete, technically feasible, and eligible project applications with appropriate supporting documentation;

(B) Preparing and submitting accurate environmental reviews and benefit-cost analyses;

(C) Submitting complete and accurate quarterly progress and financial reports on time; and

(D) Completing HMGP and other mitigation grant projects within established performance periods, including financial reconciliation.

(iv) A system and strategy by which the State will conduct an assessment of the completed mitigation actions and include a record of the effectiveness (actual cost avoidance) of each mitigation action.

(3) Demonstration that the State effectively uses existing mitigation programs to achieve its mitigation goals.

(4) Demonstration that the State is committed to a comprehensive state mitigation program, which might include any of the following:

(i) A commitment to support local mitigation planning by providing workshops and training, State planning grants, or coordinated capability development of local officials, including Emergency Management and Floodplain Management certifications.

(ii) A statewide program of hazard mitigation through the development of legislative initiatives, mitigation councils, formation of public/private

partnerships, and/or other executive actions that promote hazard mitigation.

(iii) The State provides a portion of the non-Federal match for HMGP and/or other mitigation projects.

(iv) To the extent allowed by State law, the State requires or encourages local governments to use a current version of a nationally applicable model building code or standard that addresses natural hazards as a basis for design and construction of State sponsored mitigation projects.

(v) A comprehensive, multi-year plan to mitigate the risks posed to existing buildings that have been identified as necessary for post-disaster response and recovery operations.

(vi) A comprehensive description of how the State integrates mitigation into its post-disaster recovery operations.

(c) *Review and updates.* (1) A State must review and revise its plan to reflect changes in development, progress in statewide mitigation efforts, and changes in priorities, and resubmit it for approval to the appropriate Regional Director every three years. The Regional review will be completed within 45 days after receipt from the State, whenever possible.

(2) In order for a State to be eligible for the 20 percent HMGP funding, the Enhanced State Mitigation plan must be approved by FEMA within the three years prior to the current major disaster declaration.

§ 201.6 Local Mitigation Plans.

The local mitigation plan is the representation of the jurisdiction's commitment to reduce risks from natural hazards, serving as a guide for decision makers as they commit resources to reducing the effects of natural hazards. Local plans will also serve as the basis for the State to provide technical assistance and to prioritize project funding.

(a) *Plan requirement.* (1) For disasters declared after November 1, 2003, a local government must have a mitigation plan approved pursuant to this section in order to receive HMGP project grants. Until November 1, 2003, local mitigation plans may be developed concurrent with the implementation of the project grant.

(2) Regional Directors may grant an exception to the plan requirement in extraordinary circumstances, such as in a small and impoverished community, when justification is provided. In these cases, a plan will be completed within 12 months of the award of the project grant. If a plan is not provided within this timeframe, the project grant will be terminated, and any costs incurred after

notice of grant's termination will not be reimbursed by FEMA.

(3) Multi-jurisdictional plans (e.g. watershed plans) may be accepted, as appropriate, as long as each jurisdiction has participated in the process and has officially adopted the plan. State-wide plans will not be accepted as multi-jurisdictional plans.

(b) *Planning process.* An open public involvement process is essential to the development of an effective plan. In order to develop a more comprehensive approach to reducing the effects of natural disasters, the planning process shall include:

(1) An opportunity for the public to comment on the plan during the drafting stage and prior to plan approval;

(2) An opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development, as well as businesses, academia and other private and non-profit interests to be involved in the planning process; and

(3) Review and incorporation, if appropriate, of existing plans, studies, reports, and technical information.

(c) *Plan content.* The plan shall include the following:

(1) Documentation of the *planning process* used to develop the plan, including how it was prepared, who was involved in the process, and how the public was involved.

(2) A *risk assessment* that provides the factual basis for activities proposed in the strategy to reduce losses from identified hazards. Local risk assessments must provide sufficient information to enable the jurisdiction to identify and prioritize appropriate mitigation actions to reduce losses from identified hazards. The risk assessment shall include:

(i) A description of the type, location, and extent of all natural hazards that can affect the jurisdiction. The plan shall include information on previous occurrences of hazard events and on the probability of future hazard events.

(ii) A description of the jurisdiction's vulnerability to the hazards described in paragraph (c)(2)(i) of this section. This description shall include an overall summary of each hazard and its impact on the community. The plan should describe vulnerability in terms of:

(A) The types and numbers of existing and future buildings, infrastructure, and critical facilities located in the identified hazard areas;

(B) An estimate of the potential dollar losses to vulnerable structures identified in paragraph (c)(2)(i)(A) of this section

and a description of the methodology used to prepare the estimate;

(C) Providing a general description of land uses and development trends within the community so that mitigation options can be considered in future land use decisions.

(iii) For multi-jurisdictional plans, the risk assessment section must assess each jurisdiction's risks where they vary from the risks facing the entire planning area.

(3) A *mitigation strategy* that provides the jurisdiction's blueprint for reducing the potential losses identified in the risk assessment, based on existing authorities, policies, programs and resources, and its ability to expand on and improve these existing tools. This section shall include:

(i) A description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards.

(ii) A section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard, with particular emphasis on new and existing buildings and infrastructure.

(iii) An action plan describing how the actions identified in paragraph (c)(2)(ii) of this section will be prioritized, implemented, and administered by the local jurisdiction. Prioritization shall include a special emphasis on the extent to which benefits are maximized according to a cost benefit review of the proposed projects and their associated costs.

(iv) For multi-jurisdictional plans, there must be identifiable action items specific to the jurisdiction requesting FEMA approval or credit of the plan.

(4) A *plan maintenance process* that includes:

(i) A section describing the method and schedule of monitoring, evaluating, and updating the mitigation plan within a five-year cycle.

(ii) A process by which local governments incorporate the requirements of the mitigation plan into other planning mechanisms such as comprehensive or capital improvement plans, when appropriate.

(iii) Discussion on how the community will continue public participation in the plan maintenance process.

(5) *Documentation* that the plan has been formally adopted by the governing body of the jurisdiction requesting approval of the plan (e.g., City Council, County Commissioner, Tribal Council). For multi-jurisdictional plans, each jurisdiction requesting approval of the plan must document that it has been formally adopted.

(d) *Plan review.* (1) Plans must be submitted to the State Hazard Mitigation Officer for initial review and coordination. The State will then send the plan to the appropriate FEMA Regional Office for formal review and approval.

(2) The Regional review will be completed within 45 days after receipt from the State, whenever possible.

(3) Plans must be reviewed, revised if appropriate, and resubmitted for approval within five years in order to continue to be eligible for HMGP project grant funding.

(4) Managing States that have been approved under the criteria established by FEMA pursuant to 42 U.S.C. 5170c(c) will be delegated approval authority for local mitigation plans, and the review will be based on the criteria in this part. Managing States will review the plans within 45 days of receipt of the plans, whenever possible, and provide a copy of the approved plans to the Regional Office.

PART 206—FEDERAL DISASTER ASSISTANCE FOR DISASTERS DECLARED ON OR AFTER NOVEMBER 23, 1988

2. The authority citation for part 206 is revised to read as follows:

Authority: Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. 5121–5206; Reorganization Plan No. 3 of 1978, 43 FR 41943, 3 CFR, 1978 Comp., p. 329; E.O. 12127, 44 FR 19367, 3 CFR, 1979 Comp., p. 376; E.O. 12148, 44 FR 43239, 3 CFR, 1979 Comp., p. 412; and E.O. 12673, 54 FR 12571, 3 CFR, 1989 Comp., p. 214.

2a. Revise Part 206, Subpart M to read as follows:

Subpart M—Minimum Standards

Sec.
206.400 General.
206.401 Local standards.
206.402 Compliance.

§ 206.400 General.

(a) As a condition of the receipt of any disaster assistance under the Stafford Act, the applicant shall carry out any repair or construction to be financed with the disaster assistance in accordance with applicable standards of safety, decency, and sanitation and in conformity with applicable codes, specifications and standards.

(b) Applicable codes, specifications, and standards shall include any disaster resistant building code that meets the minimum requirements of the National Flood Insurance Program (NFIP) as well as being substantially equivalent to the recommended provisions of the National Earthquake Hazards Reduction

Program (NEHRP). In addition, the applicant shall comply with any requirements necessary in regards to Executive Order 11988, Floodplain Management, Executive Order 12699, Seismic Safety of Federal and Federally Assisted or Regulated New Building Construction, and any other applicable Executive orders.

(c) In situations where there are no locally applicable standards of safety, decency and sanitation, or where there are no applicable local codes, specifications and standards governing repair or construction activities, or where the Regional Director determines that otherwise applicable codes, specifications, and standards are inadequate, then the Regional Director may, after consultation with appropriate State and local officials, require the use of nationally applicable codes, specifications, and standards, as well as safe land use and construction practices in the course of repair or construction activities.

(d) The mitigation planning process that is mandated by section 322 of the Stafford Act and 44 CFR part 201 can assist State and local governments in determining where codes, specifications, and standards are inadequate, and may need to be upgraded.

§ 206.401 Local standards.

The cost of repairing or constructing a facility in conformity with minimum codes, specifications and standards may be eligible for reimbursement under section 406 of the Stafford Act, as long as such codes, specifications and standards meet the criteria that are listed at 44 CFR 206.226(b).

§ 206.402 Compliance.

A recipient of disaster assistance under the Stafford Act must document for the Regional Director its compliance with this subpart following the completion of any repair or construction activities.

Subpart N—Hazard Mitigation Grant Program

3. Revise § 206.431 to read as follows:

§ 206.431 Definitions.

Activity means any mitigation measure, project, or action proposed to reduce risk of future damage, hardship, loss or suffering from disasters.

Applicant means a State agency, local government, Indian tribal government, or eligible private nonprofit organization, submitting an application to the grantee for assistance under the HMGP.

Enhanced State Mitigation Plan is the hazard mitigation plan approved under 44 CFR part 201 as a condition of receiving increased funding under the HMGP.

Grant application means the request to FEMA for HMGP funding, as outlined in § 206.436, by a State or tribal government that will act as grantee.

Grant award means total of Federal and non-Federal contributions to complete the approved scope of work.

Grantee means the government to which a grant is awarded and which is accountable for the use of the funds provided. The grantee is the entire legal entity even if only a particular component of the entity is designated in the grant award document. Generally, the State is the grantee. However, an Indian tribal government may choose to be a grantee, or it may act as a subgrantee under the State. An Indian tribal government acting as a grantee will assume the responsibilities of a “state”, under this subpart, for the purposes of administering the grant.

Indian tribal government means any Federally recognized governing body of an Indian or Alaska Native tribe, band, nation, pueblo, village, or community that the Secretary of Interior acknowledges to exist as an Indian tribe under the Federally Recognized Tribe List Act of 1994, 25 U.S.C. 479a. This does not include Alaska Native corporations, the ownership of which is vested in private individuals.

Local Mitigation Plan is the hazard mitigation plan required of a local or Indian tribal government acting as a subgrantee as a condition of receiving a project subgrant under the HMGP as outlined in 44 CFR 201.6.

Standard State Mitigation Plan is the hazard mitigation plan approved under 44 CFR part 201, as a condition of receiving Stafford Act assistance as outlined in § 201.4.

State Administrative Plan for the Hazard Mitigation Grant Program means the plan developed by the State to describe the procedures for administration of the HMGP.

Subgrant means an award of financial assistance under a grant by a grantee to an eligible subgrantee.

Subgrant application means the request to the grantee for HMGP funding by the eligible subgrantee, as outlined in § 206.436.

Subgrantee means the government or other legal entity to which a subgrant is awarded and which is accountable to the grantee for the use of the funds provided. Subgrantees can be a State agency, local government, private nonprofit organizations, or Indian tribal government as outlined in § 206.433.

Indian tribal governments acting as a subgrantee are accountable to the State grantee.

4. Revise § 206.432(b) to read as follows:

§ 206.432 Federal grant assistance.

* * * * *

(b) *Amounts of assistance.* The total of Federal assistance under this subpart shall not exceed either 15 or 20 percent of the total estimated Federal assistance (excluding administrative costs) provided for a major disaster under 42 U.S.C. 5170b, 5172, 5173, 5174, 5177, 5178, 5183, and 5201 as follows:

(1) *Fifteen (15) percent.* Effective November 1, 2003, a State with an approved Standard State Mitigation Plan, which meets the requirements outlined in 44 CFR 201.4, shall be eligible for assistance under the HMGP not to exceed 15 percent of the total estimated Federal assistance described in this paragraph. Until that date, existing, approved State Mitigation Plans will be accepted.

(2) *Twenty (20) percent.* A State with an approved Enhanced State Mitigation Plan, in effect prior to the disaster declaration, which meets the requirements outlined in 44 CFR 201.5 shall be eligible for assistance under the HMGP not to exceed 20 percent of the total estimated Federal assistance described in this paragraph.

(3) The estimates of Federal assistance under this paragraph (b) shall be based on the Regional Director's estimate of all eligible costs, actual grants, and appropriate mission assignments.

* * * * *

5. Section 206.434 is amended by redesignating paragraphs (b) through (g) as paragraphs (c) through (h), respectively; adding a new paragraph (b); revising redesignated paragraphs (c) introductory text and (c)(1); and revising redesignated paragraph (d) to read as follows:

§ 206.434 Eligibility.

* * * * *

(b) *Plan requirement.* (1) For all disasters declared on or after November 1, 2003, local and tribal government applicants for subgrants, must have an approved local mitigation plan in accordance with 44 CFR 201.6 prior to receipt of HMGP subgrant funding. Until November 1, 2003, local mitigation plans may be developed concurrent with the implementation of subgrants.

(2) Regional Directors may grant an exception to this requirement in extraordinary circumstances, such as in a small and impoverished community

when justification is provided. In these cases, a plan will be completed within 12 months of the award of the project grant. If a plan is not provided within this timeframe, the project grant will be terminated, and any costs incurred after notice of grant's termination will not be reimbursed by FEMA.

(c) *Minimum project criteria.* To be eligible for the Hazard Mitigation Grant Program, a project must:

(1) Be in conformance with the State Mitigation Plan and Local Mitigation Plan approved under 44 CFR part 201;

* * * * *

(d) *Eligible activities.* (1) *Planning.* Up to 7% of the State's HMGP grant may be used to develop State, tribal and/or local mitigation plans to meet the planning criteria outlined in 44 CFR part 201.

(2) *Types of projects.* Projects may be of any nature that will result in protection to public or private property. Eligible projects include, but are not limited to:

(i) Structural hazard control or protection projects;

(ii) Construction activities that will result in protection from hazards;

(iii) Retrofitting of facilities;

(iv) Property acquisition or relocation, as defined in paragraph (e) of this section;

(v) Development of State or local mitigation standards;

(vi) Development of comprehensive mitigation programs with implementation as an essential component;

(vii) Development or improvement of warning systems.

* * * * *

6. Revise § 206.435(a) to read as follows:

§ 206.435 Project identification and selection criteria.

(a) *Identification.* It is the State's responsibility to identify and select eligible hazard mitigation projects. All funded projects must be consistent with the State Mitigation Plan. Hazard Mitigation projects shall be identified and prioritized through the State, Indian tribal, and local planning process.

* * * * *

7. Revise § 206.436 to read as follows:

§ 206.436 Application procedures.

(a) *General.* This section describes the procedures to be used by the grantee in submitting an application for HMGP funding. Under the HMGP, the State or Indian tribal government is the grantee and is responsible for processing subgrants to applicants in accordance with 44 CFR part 13 and this part 206. Subgrantees are accountable to the grantee.

(b) *Governor's Authorized Representative.* The Governor's Authorized Representative serves as the grant administrator for all funds provided under the Hazard Mitigation Grant Program. The Governor's Authorized Representative's responsibilities as they pertain to procedures outlined in this section include providing technical advice and assistance to eligible subgrantees, and ensuring that all potential applicants are aware of assistance available and submission of those documents necessary for grant award.

(c) *Hazard mitigation application.*

Upon identification of mitigation measures, the State (Governor's Authorized Representative) will submit its Hazard Mitigation Grant Program application to the FEMA Regional Director. The application will identify one or more mitigation measures for which funding is requested. The application must include a Standard Form (SF) 424, Application for Federal Assistance, SF 424D, Assurances for Construction Programs, if appropriate, and a narrative statement. The narrative statement will contain any pertinent project management information not included in the State's administrative plan for Hazard Mitigation. The narrative statement will also serve to identify the specific mitigation measures for which funding is requested. Information required for each mitigation measure shall include the following:

- (1) Name of the subgrantee, if any;
- (2) State or local contact for the measure;
- (3) Location of the project;
- (4) Description of the measure;
- (5) Cost estimate for the measure;
- (6) Analysis of the measure's cost-effectiveness and substantial risk reduction, consistent with § 206.434(c);
- (7) Work schedule;
- (8) Justification for selection;
- (9) Alternatives considered;
- (10) Environmental information consistent with 44 CFR part 9, Floodplain Management and Protection of Wetlands, and 44 CFR part 10, Environmental Considerations.

(d) *Application submission time limit.* The State's application may be amended as the State identifies and selects local project applications to be funded. The State must submit all local HMGP applications and funding requests for the purpose of identifying new projects to the Regional Director within 12 months of the date of disaster declaration.

(e) *Extensions.* The State may request the Regional Director to extend the application time limit by 30 to 90 day

increments, not to exceed a total of 180 days. The grantee must include a justification in its request.

(f) *FEMA approval*. The application and supplement(s) will be submitted to the FEMA Regional Director for approval. FEMA has final approval authority for funding of all projects.

(g) *Indian tribal grantees*. Indian tribal governments may submit a SF 424 directly to the Regional Director.

Subpart H—Public Assistance Eligibility

* * * * *

8. Revise § 206.220 to read as follows:

§ 206.220 General.

This subpart provides policies and procedures for determinations of eligibility of applicants for public assistance, eligibility of work, and eligibility of costs for assistance under sections 402, 403, 406, 407, 418, 419,

421(d), 502, and 503 of the Stafford Act. Assistance under this subpart must also conform to requirements of 44 CFR part 201, Mitigation Planning, and 44 CFR part 206, subparts G—Public Assistance Project Administration, I—Public Assistance Insurance Requirements, J—Coastal Barrier Resources Act, and M—Minimum Standards. Regulations under 44 CFR part 9—Floodplain Management and 44 CFR part 10—Environmental Considerations, also apply to this assistance.

9. Section 206.226 is amended by redesignating paragraphs

(b) through (j) as paragraphs (c) through (k), respectively; adding a new paragraph (b); and revising redesignated paragraph (g)(5) to read as follows:

§ 206.226 Restoration of damaged facilities.

* * * * *

(b) *Mitigation planning*. In order to receive assistance under this section, as

of November 1, 2003, the State must have in place a FEMA approved State Mitigation Plan in accordance with 44 CFR part 201.

* * * * *

(g) * * *

(5) If relocation of a facility is not feasible or cost effective, the Regional Director shall disapprove Federal funding for the original location when he/she determines in accordance with 44 CFR parts 9, 10, 201, or subpart M of this part 206, that restoration in the original location is not allowed. In such cases, an alternative project may be applied for.

* * * * *

Dated: February 19, 2002.

Michael D. Brown,
General Counsel.

[FR Doc. 02-4321 Filed 2-25-02; 8:45 am]

BILLING CODE 6718-05-P

Appendix 1.2

Letters of Intent



RECEIVED
JUN 11 2009

BY:


COMMONWEALTH of VIRGINIA
Department of Emergency Management

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State Coordinator

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Deputy Coordinator

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To: Virginia Planning District Commission Executive Directors
From: George Roarty, Recovery and Mitigation Division Director 
Subject: FY 2010 FEMA Unified Hazard Mitigation Grant Program
Date: June 9, 2009

The Virginia Department of Emergency Management (VDEM) is pleased to announce that the period of availability for four of FEMA's five hazard mitigation program grants opened on June 1, 2009. To ensure project application eligibility and entry into FEMA's eGRANTS system all project applications must be submitted to VDEM on or before 5:00 PM Thursday, October 15, 2009. The four annually funded hazard mitigation programs must be cost-effective and compliant with the *FY 2010 Hazard Mitigation Assistance (HMA) Unified Guidance*. A brief summary follows:

The **Pre-Disaster Mitigation Grant Program (PDM)** is a nationally competitive program. The federal share is 75% with the remaining 25% from non-federal funds. The program supports local all-hazard mitigation plan development and revision, disaster resistant university plans and mitigation projects.

The **Repetitive Flood Claims Program (RFC)** is a nationally competitive program targeting repetitive loss structures. Listed properties are available for your community through VDEM upon request, privacy must be maintained regarding these databases. Applicant structures must be insured through the National Flood Insurance Program. The federal share is either 90% but can be up to 100% if specific criteria are met.

The **Flood Mitigation Assistance Program (FMA)** provides an annual appropriation in flood mitigation funds for Virginia based on the number of flood insurance policies in effect. Some states cannot use their allocation and their funds may be available through a nationally competitive process. The program targets repetitive loss properties in local jurisdictions with an approved FMA plan or FMA-compliant all hazard mitigation plan. The federal share for this program is 75%

"Working to Protect People, Property and Our Communities"

**Letter of Intent
To Participate in the Region 2000 All Hazard Mitigation Plan Update**

By signing this Letter of Intent, the City of Lynchburg hereby commits to participate in the revision of the **Region 2000 All Hazard Mitigation Plan Update** to be prepared by the Region 2000 Local Government Council in accordance with the requirements outlined in the Code of Federal Regulations Title 44 Part 201.6, and guidance provided by the Virginia Department of Emergency Management.

The **City of Lynchburg** enters into this agreement voluntarily and commits to participate fully in the plan revision, acknowledging that such participation shall include, but not limited to, local attendance/representation at upcoming planning and public meetings, responses to detailed inquiries and data requests, and fulfillment of the local match requirement by providing and tracking in-kind services and materials associated with those activities described above.

Upon conclusion of the process, **City of Lynchburg** agrees to submit the completed revised plan to its governing body for formal adoption as required under the Code of Virginia Sections 15.2-2226 and 15.2-2231 following preliminary approval by the Virginia Department of Emergency Management and the Federal Emergency Management Agency (FEMA), Region III.

Locality Name: City of Lynchburg

Locality Administrator: L. Kimball Payne

Phone #/Email: (434)455-3990 kpayne@lynchburgva.gov

Planning Agency Contact: William A. Aldrich

Phone #/Email: (434)455-4285 william.aldrich@lynchburgva.gov

Affirmation (please check one):

☒ **City of Lynchburg WILL participate in the revision of the Region 2000 All Hazard Mitigation Plan Update** in accordance with the agreement, regulations, and guidance cited above, and in accordance with any grant agreements made to provide the region with federal and/or state funding to support such revisions.

☐ **City of Lynchburg WILL NOT participate in the revision of the Region 2000 All Hazard Mitigation Plan Update**, nor will it seek to develop its own mitigation plan as described by the regulations and guidance cited above. Furthermore, this locality understands that by NOT developing a plan, or participating in the revision of the regional plan, it will not be eligible for the federal and/or state hazard mitigation funding through the Hazard Mitigation Grant Program (HMGP) and the annual Hazard Mitigation Assistance (HMA) programs.

Signatures:

L. Kimball Payne
Administrator *City Manager*
William A. Aldrich
Planning Agency Contact

9/29/09
Date
9/30/09
Date

**Letter of Intent
To Participate in the Region 2000 All Hazard Mitigation Plan Update**

By signing this Letter of Intent, Amherst County hereby commits to participate in the revision of the Region 2000 All Hazard Mitigation Plan Update to be prepared by the Region 2000 Local Government Council in accordance with the requirements outlined in the Code of Federal Regulations Title 44 Part 201.6, and guidance provided by the Virginia Department of Emergency Management.

Amherst County enters into this agreement voluntarily and commits to participate fully in the plan revision, acknowledging that such participation shall include, but not limited to, local attendance/representation at upcoming planning and public meetings, responses to detailed inquiries and data requests, and fulfillment of the local match requirement by providing and tracking in-kind services and materials associated with those activities described above.

Upon conclusion of the process, Amherst County agrees to submit the completed revised plan to its governing body for formal adoption as required under the Code of Virginia Sections 15.2-2226 and 15.2-2231 following preliminary approval by the Virginia Department of Emergency Management and the Federal Emergency Management Agency (FEMA), Region III.

Locality Name: Amherst County

Locality Administrator: C. Lee Lintecum

Phone #/Email: 434-946-9400

Planning Agency Contact: Gary M. Roakes

Phone #/Email: 434-946-9307 gmroakes@countyofamherst.com

Affirmation (please check one):

☒ Amherst County WILL participate in the revision of the Region 2000 All Hazard Mitigation Plan Update in accordance with the agreement, regulations, and guidance cited above, and in accordance with any grant agreements made to provide the region with federal and/or state funding to support such revisions.

☐ Amherst County WILL NOT participate in the revision of the Region 2000 All Hazard Mitigation Plan Update, nor will it seek to develop its own mitigation plan as described by the regulations and guidance cited above. Furthermore, this locality understands that by NOT developing a plan, or participating in the revision of the regional plan, it will not be eligible for the federal and/or state hazard mitigation funding through the Hazard Mitigation Grant Program (HMGP) and the annual Hazard Mitigation Assistance (HMA) programs.

Signatures:

C. Lee Lintecum
Administrator

November 12, 2009
Date

Gary M. Roakes
Planning Agency Contact

November 12, 2009
Date

**Letter of Intent
To Participate in the Region 2000 All Hazard Mitigation Plan Update**

By signing this Letter of Intent, Appomattox County hereby commits to participate in the revision of the **Region 2000 All Hazard Mitigation Plan Update** to be prepared by the Region 2000 Local Government Council in accordance with the requirements outlined in the Code of Federal Regulations Title 44 Part 201.6, and guidance provided by the Virginia Department of Emergency Management.

Appomattox County enters into this agreement voluntarily and commits to participate fully in the plan revision, acknowledging that such participation shall include, but not limited to, local attendance/representation at upcoming planning and public meetings, responses to detailed inquiries and data requests, and fulfillment of the local match requirement by providing and tracking in-kind services and materials associated with those activities described above.

Upon conclusion of the process, **Appomattox County** agrees to submit the completed revised plan to its governing body for formal adoption as required under the Code of Virginia Sections 15.2-2226 and 15.2-2231 following preliminary approval by the Virginia Department of Emergency Management and the Federal Emergency Management Agency (FEMA), Region III.

Locality Name: Appomattox County

Locality Administrator: Aileen T. Ferguson

Phone #/Email: 434/352/2637; aileen.ferguson@appomattoxcountyva.gov

Planning Agency Contact: Johnnie Roark

Phone #/Email: 434/352/2637; johnnie.roark@appomattoxcountyva.gov

Affirmation (please check one):

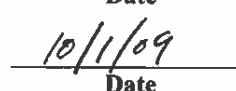
- ☒ **Appomattox County WILL participate in the revision of the Region 2000 All Hazard Mitigation Plan Update** in accordance with the agreement, regulations, and guidance cited above, and in accordance with any grant agreements made to provide the region with federal and/or state funding to support such revisions.
- ☐ **Appomattox County WILL NOT participate in the revision of the Region 2000 All Hazard Mitigation Plan Update**, nor will it seek to develop its own mitigation plan as described by the regulations and guidance cited above. Furthermore, this locality understands that by NOT developing a plan, or participating in the revision of the regional plan, it will not be eligible for the federal and/or state hazard mitigation funding through the Hazard Mitigation Grant Program (HMGP) and the annual Hazard Mitigation Assistance (HMA) programs.

Signatures:


Administrator


Planning Agency Contact


Date


Date



Bedford County

OFFICE OF THE COUNTY ADMINISTRATOR

Letter of Intent To Participate in the Region 2000 All Hazard Mitigation Plan Update

By signing this Letter of Intent, Bedford County hereby commits to participate in the revision of the **Region 2000 All Hazard Mitigation Plan Update** to be prepared by the Region 2000 Local Government Council in accordance with the requirements outlined in the Code of Federal Regulations Title 44 Part 201.6, and guidance provided by the Virginia Department of Emergency Management.

Bedford County enters into this agreement voluntarily and commits to participate fully in the plan revision, acknowledging that such participation shall include, but not limited to, local attendance/representation at upcoming planning and public meetings, responses to detailed inquiries and data requests, and fulfillment of the local match requirement by providing and tracking in-kind services and materials associated with those activities described above.

Upon conclusion of the process, Bedford County agrees to submit the completed revised plan to its governing body for formal adoption as required under the Code of Virginia Sections 15.2-2226 and 15.2-2231 following preliminary approval by the Virginia Department of Emergency Management and the Federal Emergency Management Agency (FEMA), Region III.

Locality Name: Bedford County
Locality Administrator: Kathleen D. Guzi
Phone #/Email: 540.586.7601 / k.guzi@co.bedford.va.us
Planning Agency Contact: Jack W. Jones, Jr., Fire & Rescue Chief
Phone #/Email: 540.587.0700 / j.jones@co.bedford.va.us

Affirmation (please check one):

- ☒ Bedford County WILL participate in the revision of the **Region 2000 All Hazard Mitigation Plan Update** in accordance with the agreement, regulations, and guidance cited above, and in accordance with any grant agreements made to provide the region with federal and/or state funding to support such revisions.
- ☐ Bedford County WILL NOT participate in the revision of the **Region 2000 All Hazard Mitigation Plan Update**, nor will it seek to develop its own mitigation plan as described by the regulations and guidance cited above. Furthermore, this locality understands that by NOT developing a plan, or participating in the revision of the regional plan, it will not be eligible for the federal and/or state hazard mitigation funding through the Hazard Mitigation Grant Program (HMGP) and the annual Hazard Mitigation Assistance (HMA) programs.

Signatures:

Kathleen D. Guzi
Administrator
Jack W. Jones, Jr.
Planning Agency Contact

September 21, 2009
Date
September 24, 2009
Date

122 EAST MAIN STREET, SUITE 202, BEDFORD, VIRGINIA 24523
(540) 586-7601 • FAX: (540) 586-0406
www.co.bedford.va.us

**Letter of Intent
To Participate in the Region 2000 All Hazard Mitigation Plan Update**

By signing this Letter of Intent, "^{Campbell Co}~~Insert Jurisdiction~~" hereby commits to participate in the revision of the **Region 2000 All Hazard Mitigation Plan Update** to be prepared by the Region 2000 Local Government Council in accordance with the requirements outlined in the Code of Federal Regulations Title 44 Part 201.6, and guidance provided by the Virginia Department of Emergency Management.

Campbell County enters into this agreement voluntarily and commits to participate fully in the plan revision, acknowledging that such participation shall include, but not limited to, local attendance/representation at upcoming planning and public meetings, responses to detailed inquiries and data requests, and fulfillment of the local match requirement by providing and tracking in-kind services and materials associated with those activities described above. Any funding commitments herein required would be subject to Board of Supervisors approval and appropriation.

Upon conclusion of the process, **Campbell County** agrees to submit the completed revised plan to its governing body for formal adoption as required under the Code of Virginia Sections 15.2-2226 and 15.2-2231 following preliminary approval by the Virginia Department of Emergency Management and the Federal Emergency Management Agency (FEMA), Region III.

Locality Name: Campbell County
Locality Administrator: C. William Gillespie Jr.
Phone #/Email: 434-332-9642 cwgillespie@co.campbell.va.us
Planning Agency Contact: Karen C. Briggs
Phone #/Email: 434-332-9843 kcbriggs@co.campbell.va.us

Affirmation (please check one):

- ☒ **Campbell County WILL participate in the revision of the Region 2000 All Hazard Mitigation Plan Update** in accordance with the agreement, regulations, and guidance cited above, and in accordance with any grant agreements made to provide the region with federal and/or state funding to support such revisions.
- ☐ **Campbell County WILL NOT participate in the revision of the Region 2000 All Hazard Mitigation Plan Update**, nor will it seek to develop its own mitigation plan as described by the regulations and guidance cited above. Furthermore, this locality understands that by NOT developing a plan, or participating in the revision of the regional plan, it will not be eligible for the federal and/or state hazard mitigation funding through the Hazard Mitigation Grant Program (HMGP) and the annual Hazard Mitigation Assistance (HMA) programs.

Signatures:


Administrator


Planning Agency Contact

11/5/09
Date

11/5/09
Date

**Letter of Intent
To Participate in the Region 2000 All Hazard Mitigation Plan Update**

By signing this Letter of Intent, the Town of Altavista hereby commits to participate in the revision of the Region 2000 All Hazard Mitigation Plan Update to be prepared by the Region 2000 Local Government Council in accordance with the requirements outlined in the Code of Federal Regulations Title 44 Part 201.6, and guidance provided by the Virginia Department of Emergency Management.

The Town of Altavista enters into this agreement voluntarily and commits to participate fully in the plan revision, acknowledging that such participation shall include, but not limited to, local attendance/representation at upcoming planning and public meetings, responses to detailed inquiries and data requests, and fulfillment of the local match requirement by providing and tracking in-kind services and materials associated with those activities described above.

Upon conclusion of the process, the Town of Altavista agrees to submit the completed revised plan to its governing body for formal adoption as required under the Code of Virginia Sections 15.2-2226 and 15.2-2231 following preliminary approval by the Virginia Department of Emergency Management and the Federal Emergency Management Agency (FEMA), Region III.

Locality Name: Town of Altavista

Locality Administrator: J.W. Coggsdale, III

Phone #/Email: 434-369-5001/ jwcoggsdale@ci.altavista.va.us

Planning Agency Contact: Daniel Witt, MPA

Phone #/Email: 434-369-5001/ dnwitt@ci.altavista.va.us

Affirmation (please check one):

- ☒ The Town of Altavista WILL participate in the revision of the Region 2000 All Hazard Mitigation Plan Update in accordance with the agreement, regulations, and guidance cited above, and in accordance with any grant agreements made to provide the region with federal and/or state funding to support such revisions.
- ☐ The Town of Altavista WILL NOT participate in the revision of the Region 2000 All Hazard Mitigation Plan Update, nor will it seek to develop its own mitigation plan as described by the regulations and guidance cited above. Furthermore, this locality understands that by NOT developing a plan, or participating in the revision of the regional plan, it will not be eligible for the federal and/or state hazard mitigation funding through the Hazard Mitigation Grant Program (HMGP) and the annual Hazard Mitigation Assistance (HMA) programs.

Signatures:



Administrator



Planning Agency Contact

10-15-09
Date

10-15-09
Date

**Letter of Intent
To Participate in the Region 2000 All Hazard Mitigation Plan Update**

By signing this Letter of Intent, Town of Amherst hereby commits to participate in the revision of the **Region 2000 All Hazard Mitigation Plan Update** to be prepared by the Region 2000 Local Government Council in accordance with the requirements outlined in the Code of Federal Regulations Title 44 Part 201.6, and guidance provided by the Virginia Department of Emergency Management.

Town of Amherst enters into this agreement voluntarily and commits to participate fully in the plan revision, acknowledging that such participation shall include, but not limited to, local attendance/representation at upcoming planning and public meetings, responses to detailed inquiries and data requests, and fulfillment of the local match requirement by providing and tracking in-kind services and materials associated with those activities described above.

Upon conclusion of the process, **Town of Amherst** agrees to submit the completed revised plan to its governing body for formal adoption as required under the Code of Virginia Sections 15.2-2226 and 15.2-2231 following preliminary approval by the Virginia Department of Emergency Management and the Federal Emergency Management Agency (FEMA), Region III.

Locality Name: Town of Amherst

Locality Administrator: Jack Hobbs

Phone #/Email: 434.946.7885 jack.hobbs@amherstva.gov

Planning Agency Contact: Jack Hobbs

Phone #/Email: 434.946.7885 jack.hobbs@amherstva.gov

Affirmation (please check one):

- ☒ Town of Amherst WILL participate in the revision of the **Region 2000 All Hazard Mitigation Plan Update** in accordance with the agreement, regulations, and guidance cited above, and in accordance with any grant agreements made to provide the region with federal and/or state funding to support such revisions.
- ☐ Town of Amherst WILL NOT participate in the revision of the **Region 2000 All Hazard Mitigation Plan Update**, nor will it seek to develop its own mitigation plan as described by the regulations and guidance cited above. Furthermore, this locality understands that by NOT developing a plan, or participating in the revision of the regional plan, it will not be eligible for the federal and/or state hazard mitigation funding through the Hazard Mitigation Grant Program (HMGP) and the annual Hazard Mitigation Assistance (HMA) programs.

Signatures:


Administrator

10/15/09
Date


Planning Agency Contact

10/15/09
Date

P. O. BOX 705
210 LINDEN STREET
APPOMATTOX, VA 24522

PHONE: (434) 352-8268
FAX: (434) 352-2126

TOWN MANAGER
BART S. VAN NIEUWENHUISE

Town of Appomattox



RECEIVED
OCT 15 2009

BY:

JENNIFER JAMERSON-SCRUGGS
JOHN T. (PLICKY) WILLIAMS

CLERK OF COUNCIL
ROXANNE W. PAULETTE, CMC

MAYOR
PAUL D. HARVEY

COUNCIL MEMBERS:
BRYAN J. BAINE
KARL E. CARTER
N. H. (JIMMY) MAYBERRY

C. LEWIS MCDEARMON, JR.
JOHN T. (PLICKY) WILLIAMS

Letter of Intent To Participate in the Region 2000 All Hazard Mitigation Plan Update

By signing this Letter of Intent, **Town of Appomattox** hereby commits to participate in the revision of the **Region 2000 All Hazard Mitigation Plan Update** to be prepared by the Region 2000 Local Government Council in accordance with the requirements outlined in the Code of Federal Regulations Title 44 Part 201.6, and guidance provided by the Virginia Department of Emergency Management.

Town of Appomattox enters into this agreement voluntarily and commits to participate fully in the plan revision, acknowledging that such participation shall include, but not limited to, local attendance/representation at upcoming planning and public meetings, responses to detailed inquiries and data requests, and fulfillment of the local match requirement by providing and tracking in-kind services and materials associated with those activities described above.

Upon conclusion of the process, **Town of Appomattox** agrees to submit the completed revised plan to its governing body for formal adoption as required under the Code of Virginia Sections 15.2-2226 and 15.2-2231 following preliminary approval by the Virginia Department of Emergency Management and the Federal Emergency Management Agency (FEMA), Region III.

Locality Name: Town of Appomattox
Locality Administrator: Bart S. Van Nieuwenhuise
Phone #/Email: 434.352.8268 bvannieuwenhuise@appomattoxva.gov
Planning Agency Contact: SAME
Phone #/Email: SAME

Affirmation (please check one):

- ☒ **Town of Appomattox WILL participate in the revision of the Region 2000 All Hazard Mitigation Plan Update** in accordance with the agreement, regulations, and guidance cited above, and in accordance with any grant agreements made to provide the region with federal and/or state funding to support such revisions.
- ☐ **Town of Appomattox WILL NOT participate in the revision of the Region 2000 All Hazard Mitigation Plan Update**, nor will it seek to develop its own mitigation plan as described by the regulations and guidance cited above. Furthermore, this locality understands that by NOT developing a plan, or participating in the revision of the regional plan, it will not be eligible for the federal and/or state hazard mitigation funding through the Hazard Mitigation Grant Program (HMGP) and the annual Hazard Mitigation Assistance (HMA) programs.

Signatures:

Administrator

Planning Agency Contact

Date

Date

10-9-09

10-9-09

**Letter of Intent
To Participate in the Region 2000 All Hazard Mitigation Plan Update**

By signing this Letter of Intent, the Town of Brookneal hereby commits to participate in the revision of the Region 2000 All Hazard Mitigation Plan Update to be prepared by the Region 2000 Local Government Council in accordance with the requirements outlined in the Code of Federal Regulations Title 44 Part 201.6, and guidance provided by the Virginia Department of Emergency Management.

The Town of Brookneal enters into this agreement voluntarily and commits to participate fully in the plan revision, acknowledging that such participation shall include, but not limited to, local attendance/representation at upcoming planning and public meetings, responses to detailed inquiries and data requests, and fulfillment of the local match requirement by providing and tracking in-kind services and materials associated with those activities described above.

Upon conclusion of the process, the Town of Brookneal agrees to submit the completed revised plan to its governing body for formal adoption as required under the Code of Virginia Sections 15.2-2226 and 15.2-2231 following preliminary approval by the Virginia Department of Emergency Management and the Federal Emergency Management Agency (FEMA), Region III.

Locality Name: Town of Brookneal
Locality Administrator: Buster Nicholson
Phone #/Email: 434.376.3124/townmanager@townofbrookneal.com
Planning Agency Contact: ~~Region 2000~~ *SAME*
Phone #/Email: *SAME*

Affirmation (please check one):

- ☒ **The Town of Brookneal WILL participate in the revision of the Region 2000 All Hazard Mitigation Plan Update in accordance with the agreement, regulations, and guidance cited above, and in accordance with any grant agreements made to provide the region with federal and/or state funding to support such revisions.**
- ☐ **The Town of Brookneal WILL NOT participate in the revision of the Region 2000 All Hazard Mitigation Plan Update, nor will it seek to develop its own mitigation plan as described by the regulations and guidance cited above. Furthermore, this locality understands that by NOT developing a plan, or participating in the revision of the regional plan, it will not be eligible for the federal and/or state hazard mitigation funding through the Hazard Mitigation Grant Program (HMGP) and the annual Hazard Mitigation Assistance (HMA) programs.**

Signatures:


Amos Nicholson
Administrator

SAME

Planning Agency Contact

11-10-09

11-10-09
Date

SAME

Date

**Letter of Intent
To Participate in the Region 2000 All Hazard Mitigation Plan Update**

By signing this Letter of Intent, "Insert Jurisdiction" hereby commits to participate in the revision of the **Region 2000 All Hazard Mitigation Plan Update** to be prepared by the Region 2000 Local Government Council in accordance with the requirements outlined in the Code of Federal Regulations Title 44 Part 201.6, and guidance provided by the Virginia Department of Emergency Management.

"Insert Jurisdiction" enters into this agreement voluntarily and commits to participate fully in the plan revision, acknowledging that such participation shall include, but not limited to, local attendance/representation at upcoming planning and public meetings, responses to detailed inquiries and data requests, and fulfillment of the local match requirement by providing and tracking in-kind services and materials associated with those activities described above.

Upon conclusion of the process, "Insert Jurisdiction" agrees to submit the completed revised plan to its governing body for formal adoption as required under the Code of Virginia Sections 15.2-2226 and 15.2-2231 following preliminary approval by the Virginia Department of Emergency Management and the Federal Emergency Management Agency (FEMA), Region III.

Locality Name:

TOWN OF PAMPLIN CITY, VA.

Locality Administrator:

ROBERT G. MITCHELL, MAYOR

Phone #/Email:

PH. 434-248-6514, Townofpamplin@aol.com

Planning Agency Contact:

SAME

Phone #/Email:

SAME

Affirmation (please check one):

- ☒ "Insert Jurisdiction" WILL participate in the revision of the **Region 2000 All Hazard Mitigation Plan Update** in accordance with the agreement, regulations, and guidance cited above, and in accordance with any grant agreements made to provide the region with federal and/or state funding to support such revisions.
- ☐ "Insert Jurisdiction" WILL NOT participate in the revision of the **Region 2000 All Hazard Mitigation Plan Update**, nor will it seek to develop its own mitigation plan as described by the regulations and guidance cited above. Furthermore, this locality understands that by NOT developing a plan, or participating in the revision of the regional plan, it will not be eligible for the federal and/or state hazard mitigation funding through the Hazard Mitigation Grant Program (HMGP) and the annual Hazard Mitigation Assistance (HMA) programs.

Signatures:



Administrator

Nov 16, 2009
Date



Planning Agency Contact

Nov 16, 2009
Date

Section IV

Appendix

Planning Process



Appendix 4.1

Letter stating change of budget



Region 2000 Local Government Council

828 Main Street, 12th Floor
Lynchburg, Virginia 24504
Phone: 434-845-3491
Fax: 434-845-3493
www.region2000.org

April 12, 2011

Mr. Michael M. Cline, State Coordinator of Emergency Management
Virginia Department of Emergency Management
10501 Trade Court
Richmond, VA 23236

RE: Hazard Mitigation Grant PDM-2010-000-003

Dear Mr. Cline,

We would appreciate your consideration in the allowing the Region 2000 staff to update our regional Hazard Mitigation Grant instead of using an outside consultant.

Carrying out the process in house will allow Region 2000 staff to expand their mitigation knowledge to further assist localities in identifying projects to reduce future impacts from hazard events. Our staff already has existing knowledge of the area and relationships with members of the Project Management Team which will encourage a dynamic planning process. Our staff also has the technical capability to facilitate the plan update which will include a revised and updated hazard identification and risk assessment, vulnerability analysis, capability assessment, community profiles, and updated goals and strategies.

No additional funds are requested as part of this change. This request would change the budget and the timeline for the project.

Thanks for your consideration. Bob White, LGC Deputy Director is coordinating our work on this project and can be reached at 434 845-5678 x 220 or bwhite@region2000.org if you have any questions about our request.

Sincerely,



Gary Christie
Executive Director

CC Bob White
Phillip Gabathuler

Attachments:
Revised Scope of work
Revised Budget
Revised Timeline

Appendix 4.2

Hazard Mitigation

Assistance cost-share

requirements



Region 2000 Local Government Council

828 Main Street, 12th Floor

Lynchburg, VA 24504

Phone: 434-845-3491

Fax: 434-845-3493

www.region2000.org

October 13, 2009

Mr. George Roarty
Director, Recovery and Mitigation
Virginia Department of Emergency Management
10501 Trade Court
Richmond, VA 23236

RE: Hazard Mitigation Assistance cost-share requirements

Dear Mr. Roarty:

The Region 2000 Local Government Council is applying for FY2010 Pre-Disaster Mitigation (PDM) Grant Program funded through the Federal Emergency Management Agency. We understand that the PDM grant requires a 75% federal and 25% non-federal cost share. The non-federal cost share will be fulfilled by the participating localities' cash contribution.

The Region 2000 Local Government Council recognizes that the goal of the PDM program and mitigation planning is to identify natural hazards and reduce risk and vulnerability. Based on our previous experience managing the Region 2000 Regional Commission All Hazard Mitigation Plan planning grant (VA1491-000-011, August 17, 2004, FEMA disaster number 1491) we are well positioned to implement and administer the project with that goal in mind.

We break down the non-federal match as follows:

Amherst Co.	2,403.69
Appomattox Co.	983.31
Bedford Co.	5,348.40
Campbell Co.	3,862.30
Bedford City	486.60
Lynchburg	5,711.53
Altavista	200.00
Amherst Town	200.00
Appomattox Town	200.00
Brookneal	200.00
Pamplin	200.00

Sincerely,

Gary F. Christie
Executive Director

Virginia Department of Emergency Management
Summary Sheet for Application Assurances and Certifications

Name of Applicant: Region 2000 Local Government Council

Project Title: Region 2000 All Hazard Mitigation Plan Update/Revision

Applicant's Designated Agent: Gary F. Christie, Executive Director

This summary sheet references Assurances and Certifications that must be read, signed and submitted as part of each application for hazard mitigation funding. The Applicant's Designated Agent must indicate each item included in the application package. Failure to submit this required information will result in the delay or possible removal of the application from hazard mitigation funding consideration.

The complete application package includes submittal of the following items:

- ☒ Application for Pre-Disaster Mitigation funding
- ☐ Signed Maintenance Agreement
- ☒ Signed FEMA Form 20-16 which includes the following:
 - ☒ FEMA Form 20-16A- Assurances- Non-Construction Programs (if applicable to project type)
 - ☐ FEMA Form 20-16B- Assurances- Construction Programs (if applicable to project type)
 - ☒ Completed FEMA Form 20-16C- Certifications Regarding Lobbying: Debarment, Suspension, and Other Responsibility Matters: and Drug Free Workplace Requirements
 - ☒ Completed and Signed SF LLL- Disclosure of Lobbying Activities

The undersigned certifies that the checked items have been read and signed.

GARY F. CHRISTIE
Name of Designated Agent
Gary F. Christie
Signature of Designated Agent

EXECUTIVE DIRECTOR
Title
10/14/09
Date

APPLICATION FOR FEDERAL ASSISTANCE

OMB Approval No. 0348-0043

1. TYPE OF SUBMISSION:

Application
☐ Construction
☒ Non-Construction

Preapplication
☐ Construction
☐ Non-Construction

2. DATE SUBMITTED

Applicant Identifier

3. DATE RECEIVED BY STATE

State Application Identifier

4. DATE RECEIVED BY FEDERAL AGENCY

Federal Identifier

5. APPLICANT INFORMATION

Legal Name: **Region 2000 Local Government Council**

Address (give city, county, state, and zip code):

828 Main Street, 12th Floor, Lynchburg, VA 24504-1522

Organizational Unit:

Name and telephone number of person to be contacted on matters involving this application (give area code)

Bob White 434.845.3491

6. EMPLOYER IDENTIFICATION NUMBER (EIN):

54 - 08500361

6.a. DUNS NUMBER

130508539

8. TYPE OF APPLICATION:

☒ New ☐ Continuation ☐ Revision

If Revision, enter appropriate letter(s) in box(es)

☐ ☐

A. Increase Award B. Decrease Award C. Decrease Duration
D. Decrease Duration Other (specify):

7. TYPE OF APPLICANT: (enter appropriate letter in box)

f

A. State H. Independent School Dist.
B. County I. State Controlled Institution of Higher Learning
C. Municipal J. Private University
D. Township K. Indian Tribe
E. Interstate L. Individual
F. Intermunicipal M. Profit Organization
G. Special District N. Other (Specify) _____

9. NAME OF FEDERAL AGENCY:

Federal Emergency Management Agency

10. CATALOG OF FEDERAL DOMESTIC ASSISTANCE NUMBER:

TITLE: **pre disaster mitigation program grant**

97 - 047

12. AREAS AFFECTED BY PROJECT (Cities, Counties, States, etc.):

counties of Appomattox, Amherst, Bedford, Campbell, cities of Lynchburg, Bedford, towns of Pamplin, Altavista, Amherst, Brookneal, Appomattox

11. DESCRIPTIVE TITLE OF APPLICANT'S PROJECT:

Region 2000 All Hazard Mitigation Plan Update/Revision

13. PROPOSED PROJECT:

Start Date

7/10/2010

Ending Date

6/30/2012

14. CONGRESSIONAL DISTRICTS OF:

a. Applicant

Region 2000 Local Government Council

b. Project

Region 2000 All Hazard Mitigation Plan Update/Revision

15. ESTIMATED FUNDING:

a. Federal	\$	58,500.00
b. Applicant	\$	
c. State	\$	
d. Local	\$	19,500.00
e. Other	\$	
f. Program Income	\$	
g. TOTAL	\$	78,000.00

16. IS APPLICATION SUBJECT TO REVIEW BY STATE EXECUTIVE ORDER 12372 PROCESS?

a. YES. THIS PREAPPLICATION/APPLICATION WAS MADE AVAILABLE TO THE STATE EXECUTIVE ORDER 12372 PROCESS FOR REVIEW ON:

DATE: _____

b. NO. ☒ PROGRAM IS NOT COVERED BY E.O. 12372
☐ OR PROGRAM HAS NOT BEEN SELECTED BY STATE FOR REVIEW

17. IS THE APPLICANT DELINQUENT ON ANY FEDERAL DEBT?

☐ Yes If "Yes," attach an explanation ☒ No

18. TO THE BEST OF MY KNOWLEDGE AND BELIEF, ALL DATA IN THIS APPLICATION/PREAPPLICATION ARE TRUE AND CORRECT, THE DOCUMENT HAS BEEN DULY AUTHORIZED BY THE GOVERNING BODY OF THE APPLICANT AND THE APPLICANT WILL COMPLY WITH THE ATTACHED ASSURANCES IF THE ASSISTANCE IS AWARDED.

a. Type Name of Authorized Representative

Gary F. Christie

b. Title

Executive Director

c. Telephone Number

434.845.3491

d. Signature of Authorized Representative

Gary F. Christie

e. Date Signed

10/14/09

FEDERAL EMERGENCY MANAGEMENT AGENCY
SUMMARY SHEET FOR ASSURANCES AND CERTIFICATIONS

O.M.B. No. 3067-0206
Expires February 29, 2004

FOR
FY 2011

CA FOR (Name of Applicant)
Region 2000 Local Government Council

This summary sheet includes Assurances and Certifications that must be read, signed, and submitted as a part of the Application for Federal Assistance.

An applicant must check each item that they are certifying to:

- Part I ☒ FEMA Form 20-16A, Assurances-Nonconstruction Programs
- Part II ☐ FEMA Form 20-16B, Assurances-Construction Programs
- Part III ☒ FEMA Form 20-16C, Certifications Regarding Lobbying; Debarment, Suspension, and Other Responsibility Matters; and Drug-Free Workplace Requirements
- Part IV ☒ SF LLL, Disclosure of Lobbying Activities (If applicable)

As the duly authorized representative of the applicant, I hereby certify that the applicant will comply with the identified attached assurances and certifications.

Gary F. Christie
Typed Name of Authorized Representative

Executive Director
Title


Signature of Authorized Representative

10/14/09
Date Signed

NOTE: By signing the certification regarding debarment, suspension, and other responsibility matters for primary covered transaction, the applicant agrees that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by FEMA entering into this transaction.

The applicant further agrees by submitting this application that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," provided by the FEMA Regional Office entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions. (Refer to 44 CFR Part 17.)

Paperwork Burden Disclosure Notice

"Public reporting burden for this form is estimated to average 1.7 hours per response. Burden means the time, effort and financial resources expended by persons to generate, maintain, retain, disclose, or to provide information to us. You may send comments regarding the burden estimate or any aspect of the form, including suggestions for reducing the burden to: Information Collections Management, Federal Emergency Management Agency, 500 C Street, SW, Washington, DC 20472, Paperwork Reduction Project (3067-0206). You are not required to respond to this collection of information unless a valid OMB control number appears in the upper right corner of this form. Please do not send your completed form to the above address.

**FEDERAL EMERGENCY MANAGEMENT AGENCY
ASSURANCES-NON-CONSTRUCTION PROGRAMS**

Note: Certain of these assurances may not be applicable to your project or program. If you have any questions, please contact the awarding agency. Further, certain Federal awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant, I certify that the applicant:

1. Has the legal authority to apply for Federal assistance, and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project costs) to ensure proper planning, management and completion of the project described in this application.
2. Will give the awarding agency, the Comptroller General of the United States, and if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.
3. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal gain.
4. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
5. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. Section 4728-4763) relating to prescribed standards for merit systems for programs funded under one of the nineteen statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration) 5 C.F.R. 900, Subpart F).
6. Will comply with all Federal statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. Sections 1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. Section 794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. Sections 6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) Sections 523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. 290-dd-3 and 290-ee-3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Acts of 1968 (42 U.S.C. Section 3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.
7. Will comply, or has already complied, with the requirements of Title II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or Federally assisted programs. These requirements apply to all interest in real property acquired for project purposes regardless of Federal participation in purchases.
8. Will comply with provisions of the Hatch Act (5 U.S.C. Sections 1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.
9. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. Sections 276a to 276a-7), the Copeland Act (40 U.S.C. Section 276c and 18 U.S.C. Sections 874), and the Contract Work Hours and Safety Standards Act (40 U.S.C. Sections 327-333), regarding labor standards for federally assisted construction subagreements.
10. Will comply, if applicable, with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.

11. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. Section 1451 et seq.); (f) conformity of Federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. Section 7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended, (P.L. 93-523); and (h) protection of endangered species under the Endangered Species Act of 1973, as amended, (P.L. 93-205).

12. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. Section 1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.

13. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. 470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. 469a-1 et seq.).

14. Will comply with P.L. 93-348 regarding the protection of human subjects involved in research, development, and related activities supported by this award of assistance.

15. Will comply with the Laboratory Animal Welfare Act of 1966 (P.L. 89-544, as amended, 7 U.S.C. 2131 et seq.) pertaining to the care, handling, and treatment of warm blooded animals held for research, teaching, or other activities supported by this award of assistance.

16. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. Section 4801 et seq.) which prohibits the use of lead based paint in construction or rehabilitation of residence structures.

17. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act of 1984.

18. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations and policies governing this program.

19. It will comply with the minimum wage and maximum hours provisions of the Federal Fair Labor Standards Act (29 U.S.C. 201), as they apply to employees of institutions of higher education, hospitals, and other non-profit organizations.

Gary F. Christie

Signature

10/14/09

Date

FEDERAL EMERGENCY MANAGEMENT AGENCY
CERTIFICATIONS REGARDING LOBBYING; DEBARMENT, SUSPENSION AND
OTHER RESPONSIBILITY MATTERS; AND DRUG-FREE WORKPLACE REQUIREMENTS

Applicants should refer to the regulations cited below to determine the certification to which they are required to attest. Applicants should also review the instructions for certification included in the regulations before completing this form. Signature on this form provides for compliance with certification requirements under 44 CFR Part 18, "New Restrictions on Lobbying; and 28 CFR Part 17, "Government-wide Debarment and suspension (Nonprocurement) and Government-wide Requirements for Drug-Free Workplace (Grants)." The certifications shall be treated as a material representation of fact upon which reliance will be placed when the Federal Emergency Management Agency (FEMA) determines to award the covered transaction, grant, or cooperative agreement.

1. LOBBYING

A. As required by section 1352, Title 31 of the U.S. Code, and implemented at 44 CFR Part 18, for persons entering into a grant or cooperative agreement over \$100,000, as defined at 44 CFR Part 18, the applicant certifies that:

(a) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of congress, or an employee of a Member of Congress in connection with the making of any Federal grant, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal grant or cooperative agreement;

(b) If any other funds than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or an employee of Congress, or employee of a member of Congress in connection with this Federal grant or cooperative agreement, the undersigned shall complete and submit Standard Form LLL, "Disclosure of Lobbying Activities," in accordance with its instructions;

(c) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subgrants, contracts under grants and cooperative agreements, and subcontract(s) and that all subrecipients shall certify and disclose accordingly.

☐ Standard Form LLL, "Disclosure of Lobbying Activities" attached.
(This form must be attached to certification if nonappropriated funds are to be used to influence activities.)

**2. DEBARMENT, SUSPENSION, AND OTHER
RESPONSIBILITY MATTERS
(DIRECT RECIPIENT)**

As required by Executive Order 12549, Debarment and Suspension, and implemented at 44 CFR Part 67, for prospective participants in primary covered transactions, as defined at 44 CFR Part 17, Section 17.510-A. The applicant certifies that it and its principals:

(a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, sentenced to a denial of Federal benefits by a State or Federal court, or voluntarily excluded from covered transactions by any Federal department or agency;

(b) Have not within a three-year period preceding this application been convicted of or had a civilian judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or perform a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and

(d) Have not within a three-year period preceding this application had one or more public transactions (Federal, State, or local) terminated for cause or default; and

B. Where the applicant is unable to certify to any of the statements in this certification, he or she shall attach an explanation to this application.

**3. DRUG-FREE WORKPLACE
(GRANTEES OTHER THAN INDIVIDUALS)**

As required by the Drug-Free Workplace Act of 1988, and implemented at 44 CFR Part 17, Subpart F, for grantees, as defined at 44 CFR Part 17, Sections 17.615 and 17.620:

A. The applicant certifies that it will continue to provide a drug-free workplace by:

(a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;

(b) Establishing an on-going drug free awareness program to inform employees about:

- (1) The dangers of drug abuse in the workplace;
- (2) The grantee's policy of maintaining a drug-free workplace;
- (3) Any available drug counseling, rehabilitation, and employee assistance programs; and
- (4) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;

(c) Making it a requirement that each employee to be engaged in the performance of the grant to be given a copy of the statement required by paragraph (a);

(d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will:

(1) Abide by the terms of the statement; and

(2) Notify the employee in writing of his or her conviction for a violation of a criminal drug statute occurring in the workplace no later than five calendar days after such conviction.

(e) Notifying the agency, in writing, within 10 calendar days after receiving notice under subparagraph (d)(2) from an employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must provide notice, including position title, to the applicable FEMA awarding office, i.e., regional office or FEMA office.

(f) Taking one of the following actions, within 30 calendar days of receiving notice under subparagraph (d)(2), with respect to any employee who is so convicted:

(1) Taking appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; or

(2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency.

(g) Making a good faith effort to continue to maintain a drug free workplace through implementation of paragraphs (a), (b), (c), (d), (e), and (f).

8. the grantee may insert in the space provided below the site(s) for the performance of work done in connection with the specific grant:

Place of Performance (Street address, City, County, State, Zip code)

Region 2000 Local Government Council

828 Main Street, 12th Floor

Lynchburg, VA 24504-1522

Check ☐ if there are workplaces on file that are not identified here.

Section 17.630 of the regulations provide that a grantee that is a State may elect to make one certification in each Federal fiscal year. A copy of which should be included with each application for FEMA funding. States and State agencies may elect to use a Statewide certification.

DISCLOSURE OF LOBBYING ACTIVITIES

Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352
(See reverse for public burden disclosure)

Approved by OMB
0348-0046

1. Type of Federal Action: <input type="checkbox"/> a. contract <input type="checkbox"/> b. grant <input type="checkbox"/> c. cooperative agreement <input type="checkbox"/> d. loan <input type="checkbox"/> e. loan guarantee <input type="checkbox"/> f. loan insurance	2. Status of Federal Action: <input checked="" type="checkbox"/> a. bid/offer/application <input type="checkbox"/> b. initial award <input type="checkbox"/> c. post-award	3. Report Type: <input checked="" type="checkbox"/> a. initial filing <input type="checkbox"/> b. material change For Material Change Only: year _____ quarter _____ date of last report _____
4. Name and Address of Reporting Entity: <input type="checkbox"/> Prime <input checked="" type="checkbox"/> Subawardee REGION 2000 LOCAL GOVT' COUNCIL 828 MAIN STREET, 12TH FLOOR LYNDENBURG, VA 24504-1522 Congressional District, if known: 5, 6		5. If Reporting Entity in No. 4 is Subawardee, Enter Name and Address of Prime: Congressional District, if known:
6. Federal Department/Agency: Federal Emergency Management Agency		7. Federal Program Name/Description: pre disaster mitigation program CFDA Number, if applicable: 97.047
8. Federal Action Number, if known:		9. Award Amount, if known:
10. a. Name and Address of Lobbying Registrant <i>(if individual, last name, first name, MI):</i> na		b. Individuals Performing Services (including address if different from No. 10a) <i>(last name, first name, MI):</i> na
11. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.		Signature: <u>Gary F. Christie</u> Print Name: <u>Gary F. Christie</u> Title: <u>Executive Director</u> Telephone No.: <u>434.845.3491</u> Date: <u>10/14/09</u>
Federal Use Only:		Authorized for Local Reproduction Standard Form LLL (Rev. 7-97)

2008 Unified Hazard Mitigation (HMA) Application

This notice clarifies the roles of the Virginia Department of Emergency Management (VDEM) in regards to the 2008 HMA Application(s) submitted by Region 2000 Local Government Council, Virginia. Following the submission of a completed application, VDEM will assign an HMA project number and enter the application into the Federal eGrants system. Once data entry commences minor changes may be made at the discretion of the VDEM Project Specialist and all major changes (i.e. budget, scope of work, etc.) will seek approval from the aforementioned community.


Please check the appropriate box and sign at the bottom of this notice.

☒ **I accept the above rules of eGrants data entry**

☐ **I do not accept the above rules of eGrants data entry**



Signature



Date

Gary F. Christie, Executive Director
Name and Title

434.845.3491
Phone Number

Appendix 4.3

Hazard Mitigation

Update Grant

Application and

Approval



COMMONWEALTH of VIRGINIA
Department of Emergency Management

MICHAEL M. CLINE
State Coordinator

JACK KING
Chief Deputy Coordinator

BRETT A. BURDICK
Deputy Coordinator

10501 Trade Court
Richmond, Virginia 23236-3713
(804) 897-6500
(TDD) 674-2417
FAX (804) 897-6506

September 21, 2010

Bob White
Executive Director
828 Main Street, 12th Floor
Lynchburg, VA 24504

RE: Virginia's Region 2000 Local Government Council All Hazards Mitigation Plan Update
PDM-2010-000-003

Dear Mr. White:

I am pleased to notify you that the Federal Emergency Management Agency has approved the project titled "Region 2000 All Hazards Mitigation Plan Update." The funds have been obligated through the FY 2010 Pre-Disaster Mitigation Grant Program. Attached you will find the grant award package. Please read all documents carefully prior to initiating your project. Your project cannot begin until the authorized agent has signed the grant award package. No reimbursements will be made until the award package is signed and received by the Virginia Department of Emergency Management. Please sign each of the two copies of the grant award package and return one to the attention of Debbie Messmer, hazard mitigation coordinator.

Again, congratulations on approval of this project. If you have questions regarding this award or the implementation of your project, please contact Debbie Messmer at (804) 897-6500 or by email at debbie.messmer@vdem.virginia.gov.

Sincerely,

A handwritten signature in dark ink, appearing to read "Michael M. Cline".

Michael M. Cline

MMC/MWW/djm

Enclosures

"Working to Protect People, Property and Our Communities"



COMMONWEALTH of VIRGINIA
Department of Emergency Management

MICHAEL M. CLINE
State Coordinator

JACK KING
Chief Deputy Coordinator

BRETT A. BURDICK
Deputy Coordinator

10501 Trade Court
Richmond, Virginia 23236-3713
(804) 897-6500
(TDD) 674-2417
FAX (804) 897-6506

Pre-Disaster Mitigation Grant Program
Grant Agreement
PDM-2010-000-003

This Agreement is made as of this 21st day of September 2010 by and between the Virginia Department of Emergency Management, hereinafter called "VDEM," and the Virginia's Region 2000 Local Government Council herein after called the "Sub-grantee."

The parties to this Agreement, in consideration of the mutual covenants and stipulations set out herein, agree as follows:

(1) GENERAL PROVISIONS:

This Agreement is a sub-grant award of federal funds from VDEM to the sub-grantee. VDEM has received a grant from the Department of Homeland Security Federal Emergency Management Agency Pre-Disaster Mitigation Grant Program, Catalog of Federal Domestic Assistance Number 97.047. The sub-grantee shall implement the project as set forth in the grant Agreement documents. These documents consist of:

- (1) Executed Grant Agreement;
- (2) Scope of Services, Attachment A;
- (3) Project Budget, Attachment B;
- (4) Milestone Table, Attachment C; and
- (5) Grant Assistance Agreements and VDEM-FEMA General Terms and Conditions and Assurances; Attachment D.

State agencies acting as the sub-grantee shall report all federal funds received as part of this Agreement as federal pass-thru funds on their agency's Schedule of Federal Assistance.

Nothing in this Agreement shall be construed as authority for either party to make commitments which will bind the other party beyond the Scope of Work contained herein. Furthermore, the sub-grantee shall assign, sublet or subcontract any work related to this Agreement or any interest it may have herein with full compliance with federal and state procurement regulations. The schedule of service set forth in the Scope of Work and Milestone Table shall be deemed to have been consented to, as required by the preceding sentence, upon the execution of this Agreement by VDEM.

"Working to Protect People, Property and Our Communities"

(2) SCOPE OF SERVICES:

The sub-grantee shall provide the service to VDEM set forth and summarized in the Scope of Work (Attachment A) and Milestone Table (Attachment C). All deliverables shall conform to accepted standards and practices. If there is any change in the original scope of work, a formal request must be made to VDEM for review and approval prior to implementing the change. These attachments are consistent with the original VDEM-FEMA (Federal Emergency Management Agency) grant project application. The sub-grantee shall provide VDEM with quarterly reports and a final report on the progress of work set forth in the Scope of Work. The quarterly reports and final report shall contain the following components: (1) a narrative describing in detail the progress of the sub-grantee in fulfilling the provisions of the Scope of Works; (2) Reimbursement Requests as needed that itemize the expenses incurred by the sub-grantee, including separate columns for the federal, state and the sub-grantee's matching contribution to the total cost of services as reflected in the Project Budget-Attachment B; and (3) the schedule of specific project tasks with target completion dates and actual completion dates (Milestone Table – Attachment C). The first quarterly report is due to VDEM at the end of the first complete quarter following the award of the grant.

Reporting Period

January 1 – March 31

April 1 – June 30

July 1 – September 30

October 1 – December 31

Report Due to VDEM

no later than April 15

no later than July 15

no later than October 15

no later than January 15

(3) TIME OF PERFORMANCE:

The services of the sub-grantee shall begin on the date of sub-grantee's signature of this document and terminate on 6-30-2012, unless otherwise altered through provisions of this Agreement or extended by written authorization of VDEM. Requests for time of performance extension must be received in writing by VDEM within 75 days of termination date with reasons for requested time of performance extension and a revised Milestone Table – Attachment C. All time limits stated are of essence of this Agreement. All funds must be obligated no later than the project completion date. The final request for reimbursement must be received no later than 60 days after the completion date for the project.

(4) COMPENSATION:

The total grant award from VDEM is \$78,000 provided through the FY2010 Pre-Disaster Mitigation Grant Program. VDEM shall provide funds for the project identified in the Scope of Work (Attachment A) totaling \$58,500. The sub-grantee agrees to provide a match in the amount of \$19,500. The sub-grantee is aware of and shall comply with cost-sharing requirements of federal and state mitigation grant assistance; specifically that federal assistance is limited to 75% of eligible expenditures, and the sub-grantee shall provide from the sub-grantee's funds 25% of eligible costs. The non-federal funds must be from a non-federal funding source and can be completely fulfilled by in-kind services as long as financial records document them as such.

VDEM shall release the grant award to the sub-grantee on a cost-reimbursement basis upon receipt and approval of the sub-grantee's quarterly and final reports and deliverables as required by this Agreement or at other times agreed to by VDEM. Any cost overruns incurred by the sub-grantee during the time of performance shall be the responsibility of the sub-grantee. The sub-grantee shall spend the funds according to the specified categories of the contract budget. The sub-grantee shall use mitigation grant funds solely for the purposes for which these funds are provided and as approved by FEMA and VDEM. General policies for determining allowable costs are established in 44 Code of Federal Regulations (CFR), Part 13.22 (included in Attachment D) and the appropriate OMB circulars that identify cost principles for different kinds of organizations. Minor shifts of the funds among categories by the sub-grantee, not to exceed 10% of any budget line item are permissible, but in no case can the total expenditures exceed the amount provided by this contract. Shifts in funds exceeding 10% among budget line items must be approved in writing by VDEM.

“Working to Protect People, Property and Our Communities”

(5) ASSISTANCE:

VDEM agrees upon request of the sub-grantee to furnish, or otherwise make available to the sub-grantee, copies of existing non-proprietary materials in the possession of VDEM that are reasonably related to the subject matter of this Agreement and are necessary to the sub-grantee for completion of its performance under this Agreement. VDEM Recovery and Mitigation Division staff will provide technical support to the sub-grantee and make periodic site visits to monitor progress.

(6) ACKNOWLEDGEMENTS:

The role of the Virginia Department of Emergency Management (VDEM) and the Federal Emergency Management Agency (FEMA) must be clearly stated in all press releases, news articles, requests for proposals, bid solicitations and other documents describing this project, whether funded in whole or part.

Acknowledgement of financial assistance, with VDEM and FEMA logos, must be printed on all reports, studies, web sites, and other products (including map products) supported, in whole or in part, by this award or any sub-award. The sub-grantee is responsible for contacting VDEM staff in adequate time to obtain the logo in camera-ready or digital form. The final draft must be approved by VDEM staff prior to production. The acknowledgement should read as follows:

This report was funded by the Federal Emergency Management Agency through the Virginia Department of Emergency Management, via Grant Agreement Number PDM-2010-000-003 for \$78,000.

(7) CREATION OF INTELLECTUAL PROPERTY:

To the extent that the copyright to any copyrightable material created pursuant to this Agreement is owned by the sub-grantee and/or the sub-grantee is empowered to license its use, VDEM agrees to grant to the sub-grantee, and hereby does grant to the sub-grantee, a license to use the materials so owned for public, not-for-profit purpose within the territory of the Commonwealth and shall execute and deliver such further documents as the Commonwealth may reasonably request for the purpose of acknowledging or implementing such license.

A copyright notice shall be placed in an appropriate location on any copyrightable material being distributed or published. Such notice shall include (1) either the symbol "©", the word "Copyright", or the abbreviation "Copr."; (2) the year of first publication; and (3) the name of the copyright owner (the Commonwealth of Virginia). This information shall be followed by the words, "all rights reserved."

(8) STRUCTURAL MITIGATION REQUIREMENTS:

Specific requirements must be adhered to for structural mitigation projects such as structural relocation, property acquisition and demolition and structural retrofitting or improvement as detailed in Attachment D. These requirements can include deed restrictions, operation and maintenance plans and insurance requirements, as dictated by the specific grant and project requirements.

(9) **BREACH AND TERMINATION:**

In the event of breach by the sub-grantee of this Agreement, VDEM shall provide written notice to the sub-grantee specifying the manner in which the Agreement has been breached. If a notice of breach is given and the sub-grantee has not substantially corrected the breach within sixty (60) days of receipt of the written notice, VDEM shall have the right to terminate the Agreement. The sub-grantee shall be paid for no service rendered or expense incurred after receipt of the notice of termination, except such fees and expenses incurred prior to the effective date of termination that are necessary for curtailment of its work under the Agreement. Termination of this Agreement can occur as an effect of one of two results: First, as a result of the proper completion and closeout of this project. Second, termination may occur as a result of *Termination for Convenience* or other termination as allowed or required by 44 CFR for projects which cannot be completed as described in the FEMA-approved grant project application and the Scope of Services – Attachment, herein. Communication of this decision and information related to the project termination will be provided to the sub-grantee in coordination with FEMA through registered mail.

IN WITNESS THEREOF the parties have caused this Agreement to be executed by the following duly authorized officials:

Sub-grantee:

Virginia's Region 2000 Local Government Council

By: 

Date: 11/9/10

Authorized sub-grantee signatory

Grantor:

Virginia Department of Emergency Management

By: 

Date: 215/10

State Coordinating Officer

"Working to Protect People, Property and Our Communities"

Project Sponsor: Virginia's Region 2000 Local Government Council

Project Title: Region 2000 Regional Hazard Mitigation Plan Update

Project Description from VDEM-FEMA PDM application:

This will be a review and update/revision of the Region 2000 Regional Commission All Hazard Mitigation Plan. The Plan that was approved by FEMA in August, 2006. The update will involve an evaluation and revision of the various sections of the plan, including a revised planning process, capability assessment, Hazard Identification and Risk Assessment (HIRA), vulnerability assessment, and the plan maintenance section. Mitigation strategies will also be reviewed, evaluated, and updated to better prepare the participating localities for the risks associated with the hazards addressed in the plan. Information on hazards that have occurred since the 2006 plan will be included in the revision, and data on estimated losses, repetitive loss properties, and properties at risk will be updated to the extent possible. Land use data for the region will be updated for the plan, based on information from local comprehensive plans and other plans. In addition, updated DFIRM data, where available, will be used to map the flood hazard areas of each locality. Mr. White, Deputy Director, Region 2000 Local Government Council, will oversee the Plan update. He will provide oversight of the tasks involved in the update. A consultant will assist with Plan development. These tasks will include data collection for the purpose of updating the HIRA, GIS mapping of land use patterns, critical facilities, hazard areas such as flood zones, and other relevant assets/facilities. Mapping will also outline areas that are most vulnerable to natural hazards. The Council, working with the consultant, will also facilitate the review and update of mitigation strategies, and facilitating public involvement. The Virginia Department of Emergency Management will assist in providing hazard data from the state hazard mitigation plan and other assistance as needed. The Council will form a Project Management Team (PMT), and ask each participating locality to appoint a member to serve on that team. That member could be a local government staff, law enforcement officer, fire/rescue personnel, member of the local governing body, or other relevant stakeholders. The PMT will assist Council and consultant staff in reviewing and updating the plan, and individual team members will serve as liaisons between the Council and consultant and their respective locality. In addition to the PMT, other stakeholders in the region will be invited to participate through a series of meetings on the project.

Attachment B
PDM-2010-000-003
Project Budget

Project Awarded Budget – Funding Source:

Federal Project Funds – PDM	\$	58,500
Local Match	\$	19,500
Total Project Costs	\$	78,000

Project Budget from VDEM-FEMA PDM application:

ACTIVITY	NUMBER	COST	TOTAL COST
Project Management	1	\$3,900	\$3,900
Consultant to Facilitate Plan Review	1	\$74,100	\$74,100
TOTAL PROJECT COSTS			\$78,000

Attachment C
PDM-2010-000-003
Project Milestone Table

Description Of Task	Starting Point	Unit Of Time	Duration	Unit Of Time
Establish Mitigation Plan Project Management Team (key stakeholders)	1	DAYS	1	MONTHS
Review current plan and identify data requirements	1	MONTHS	1	MONTHS
Meet with PMT to go over process, timeline for project completion	2	MONTHS	1	DAYS
Hazard Identification and Risk Assessment (HIRA)	2	MONTHS	2	MONTHS
Present findings of HIRA to PMT for review/comment	4	MONTHS	1	DAYS
Presentations to local governing bodies/other public groups to promote awareness and solicit feedback on planning process	4	MONTHS	3	MONTHS
Set goals for mitigation strategies and review mitigation activities	7	MONTHS	1	MONTHS
Capability assessment and mitigation strategy development	8	MONTHS	2	MONTHS
Print draft mitigation plan, Comprehensive plan review by local Planning Commissions/Governing Bodies	10	MONTHS	3	MONTHS
Preliminary Plan Review by VDEM	13	MONTHS	1	MONTHS
Plan review and FEMA conditional approval pending adoption	14	MONTHS	2	MONTHS
Public hearings/Mitigation Plan adoption by Local Governing Bodies	16	MONTHS	2	MONTHS
Final Mitigation Plan approval	18	MONTHS	1	MONTHS
Finalize project, print and distribute final copies	19	MONTHS	1	MONTHS
Estimate the total duration of the proposed activity			20	MONTHS

“Working to Protect People, Property and Our Communities”

Attachment D
Administrative Requirements and Guidance

Federal Administration and Guidance Documents:

1. OMB Circular A-133 **AUDITS OF STATES, LOCAL GOVERNMENTS, AND NON-PROFIT ORGANIZATIONS**
2. 44 CFR 13 **UNIFORM ADMINISTRATIVE REQUIREMENTS FOR GRANTS AND COOPERATIVE AGREEMENTS TO STATE AND LOCAL GOVERNMENTS**
3. 44 CFR Part 201 **MITIGATION PLANNING** [FMA, PDM and HMGP planning projects only]
4. 44 CFR Part 206 – Subpart N – **HAZARD MITIGATION GRANT PROGRAM**
5. CATEX documentation (where required)
6. Structural Mitigation Project Requirements (where required)
7. FEMA Award Package

Award Letter

U.S. Department of Homeland Security
FEMA Region III
615 Chestnut Street
Philadelphia, PA 19106



FEMA

George Roarty
Director, Recovery and Mitigation Division, Virginia Department of Emergency Management
10501 Trade Court

Richmond, VA 23236-0000

Dear **George Roarty**:

Enclosed is an executed copy of FEMA Form 76-10A reflecting the award to your **FY 2010 PDMC Grant (PDMC-03-VA-2010)**. Your SMARTLINK Grant Payment Account will be adjusted accordingly.

By accepting this award you assume certain administrative and financial responsibilities including the timely submission of all financial and programmatic reports, resolution of all interim audit findings and the maintenance of a minimum level of cash on hand. Should you not adhere to these responsibilities, you will be in violation of the terms of this award.

If you have any questions regarding this matter, please call **Karen Van Osten** at **215-931-5518**.

Sincerely,

Kathryn Duran
Assistance Officer

www.fema.gov

PDMC Agreement Articles

DEPARTMENT OF HOMELAND SECURITY
FEDERAL EMERGENCY MANAGEMENT AGENCY
Pre-Disaster Mitigation - Competitive Grant Agreement Articles

CFDA# 97.047

GRANTEE: Virginia Department of Emergency Management

AGREEMENT NUMBER: EMP-2010-PC-0002 **AMENDMENT NUMBER:** 0

DESIGNATED AGENCY: Virginia Department of Emergency Management

PERFORMANCE PERIOD: 30-SEP-10 - 30-SEP-13

GENERAL INFORMATION:

The Pre-Disaster Mitigation - Competitive (PDMC) grant program provides funding for cost-effective hazard mitigation activities that complement comprehensive mitigation program, reduce injuries, loss of life, and damage and destruction of property.

ARTICLE I - FEMA AUTHORITY

The United States of America through the Federal Emergency Management Agency (FEMA) which is now incorporated into the Department of Homeland Security, (hereinafter referred to as "the Grantor") agrees to grant to the state/Indian tribe/territory government, through its designated agency named above (hereinafter referred to as "the Grantee") funds in the amount specified on the obligating document, to support the Pre-Disaster Mitigation - Competitive Grant Program, authorized under the 203 Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. & 5121-5206 (Stafford Act), and activated under this Grant Award.

The Grantee agrees to abide by the Grant Award terms and conditions as set forth in this document.

ARTICLE II - PROJECT DESCRIPTION

The Grantee shall perform the work described in the application package and made a part of these Grant Agreement Articles.

ARTICLE III - PERIOD OF PERFORMANCE

The initial performance period for the Grantee shall be equal to the longest performance period of the Sub-grantee awards. The period of performance shall be through 30-SEP-13. All costs must be incurred during the period of performance unless pre-award costs are approved.

ARTICLE IV - AMOUNT AWARDED

This Grant is for the administration and completion of an approved Pre-Disaster Mitigation - Competitive grant award for fiscal year 2010. Grant Agreement funds shall not be used for other purposes. If costs exceed the maximum amount of FEMA funding approved, the Grantee shall pay the costs in excess of the approved budget.

The approved budget for this award by category is:

Line Item	Federal	Non-Federal	Total
Personnel	\$0.00	\$0.00	\$0.00
Fringe Benefit	\$0.00	\$0.00	\$0.00
Travel	\$0.00	\$0.00	\$0.00
Equipment	\$0.00	\$0.00	\$0.00
Supplies	\$0.00	\$0.00	\$0.00

Contractual	\$584,820.48	\$194,940.47	\$779,760.95
Construction	\$0.00	\$0.00	\$0.00
Other	\$0.00	\$0.00	\$0.00
TOTAL DIRECT	\$584,820.48	\$194,940.47	\$779,760.95
TOTAL BUDGET	\$584,820.48	\$194,940.47	\$779,760.95

The Grantee shall follow Emergency Management and Assistance Regulations found in Title 44 Code of Federal Regulations (CFR) Part 13, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments, Office of Management and Budget Circulars A-102 and A-87, and program guidance to implement this Grant Award.

ARTICLE V - COST SHARE

The cost-share requirement for this award is **75% Federal** and **25% non-Federal**. Small, impoverished communities may receive a Federal cost share of up to 90% of the total cost to implement eligible PDMC activities.

a. The approved budget for state and/or non-small, impoverished communities: Federal funds of \$584,820.45 (825.0%) and non-Federal funds of \$194,940.50 (275.0%) for a total approved amount of \$779,760.95.

b. The following small, impoverished communities have been approved for cost share less than the required 25% non-Federal:

Subgrantee	Federal funds	%	Non-Federal funds	%	Total approved amount
Total	\$0.00	0.00%	\$0.00	0.00%	\$0.00

c. The total approved budget of Federal funds is \$584,820.45 and non-Federal funds are \$194,940.50 for a total approved amount of \$779,760.95, which includes the combination of a. and b. above.

ARTICLE VI - FEMA OFFICIALS

FEMA officials are as follows:

The Project Officer shall be an official at the FEMA Regional Office who will be responsible for the program and technical monitoring of the work and technical performance of the activities described in the application.

The Project Officer is: JOHN SCHMIERER

The Assistance Officer is the FEMA official who has full authority to negotiate, administer and execute all business matters of the Grant Award.

The Assistance Officer is: Kathryn Duran

ARTICLE VII - TERMS AND CONDITIONS

The specific terms and conditions of this agreement are as follows:

ASSURANCE COMPLIANCE:

The certifications signed by the Grantee in the application relating to maintenance of a Drug-Free workplace (44 CFR Part 17, Subpart F) and New Restrictions on Lobbying (44 CFR Part 18) apply to this grant agreement and are incorporated by reference.

BUDGET REVISIONS:

The Grantee shall follow prior approval requirements for budget revisions found in 44 CFR 13.30. Transfer of funds between total direct cost categories in the approved budget shall receive the prior approval of FEMA when such cumulative transfers among those direct cost categories exceed ten percent of the total budget.

If a Grantee estimates that it will have obligated funds remaining after the end of the performance period, the Grantee must report this to the FEMA Regional Office at the earliest possible time and ask for disposition instructions.

CLOSE OUT:**Reports Submission:**

Per 44 CFR 13.50, when the appropriate grant award performance period expires, the Grantee shall submit the following documents within 90 days: (1) a final Financial Status Report (FF 20-10), (2) final program performance report, (3) an inventory of equipment purchased under each grant's funds, (4) an inventory of Federally-owned property, (5) other required documents specified by program regulation.

Report Acceptance:

FEMA shall review the Grantee reports, perform the necessary financial reconciliation, negotiate necessary adjustments between the Grantee and FEMA's records, and close out the grant in writing.

Record Retention:

Records shall be retained for 3 years (except in certain rare circumstances described in 44 CFR 13.42) from the date the final financial status report is submitted to FEMA in compliance with 44 CFR 13.42.

CONSTRUCTION PROJECT REQUIREMENTS:

1. Acceptance of Federal funding requires FEMA, the Grantee and any Subgrantees to comply with all Federal, state and local laws prior to the start of any construction activity. Failure to obtain all appropriate Federal, state and local environmental permits and clearances may jeopardize Federal funding.
2. Any change to the approved scope of work will require re-evaluation by FEMA for Grantee and Subgrantee compliance with the National Environmental Policy Act and other laws and Executive Orders.
3. If ground disturbing activities occur during construction, the Grantee and any Subgrantees must ensure monitoring of ground disturbance and, if any potential archeological resources are discovered, the Subgrantee will immediately cease construction in that area and notify the Grantee and FEMA.

COPYRIGHT:

The Grantee is free to copyright any original work developed in the course of or under the agreement. FEMA reserves a royalty-free, nonexclusive and irrevocable right to reproduce, publish or otherwise use, and to authorize others to use the work for Government purposes. Any publication resulting from work performed under this agreement shall include an acknowledgement of FEMA financial support and a statement that the publication does not constitute an endorsement by FEMA or reflect FEMA views.

COST SHARE:

The Grantee shall follow cost-sharing requirements mandated by program guidance, statute or regulation and in compliance with 44 CFR 13.24. Cost-share funding shall be available with the approval of each grant. Performance Period extensions shall not be approved for delays caused by lack of cost-share funding.

ENFORCEMENT:

FEMA enforcement remedies shall be processed as specified in 44 CFR 13.43, Enforcement when the Terms and Conditions of this Grant Award are not met.

EQUIPMENT/SUPPLIES:

The Grantee must comply with the regulations listed in 44 CFR 13.32, Equipment, 44 CFR 13.33 Supplies, and 44 CFR 13.36 Procurement, and must be in compliance with state laws and procedures.

FUNDS TRANSFER:

No transfer of funds to agencies other than those identified in the approved grant agreement shall be made without prior approval of FEMA.

INSURANCE:

In compliance with Public Law 103-325, Title V National Flood Insurance Reform Act of 1973, section 582 requires that any person receiving Federal assistance for the repair, replacement, or restoration for damage to any personal or residential property at any time must maintain flood insurance if the property is located in a Special Flood Hazard Area.

PAYMENT:

Grantee shall be paid using the Federal Health and Human Services (HHS) Payment Management System-SMARTLINK, provided Grantee maintains and complies with procedures for minimizing the time between transfer of funds from the US Treasury and disbursement by the Grantee and subgrantees. The Grantee commits itself to: 1) initiating cash draw downs only when actually needed for its disbursement; 2) timely financial reporting per FEMA requirements, using the SF 269 or equivalent report; and 3) imposing the same standards of timing and amount upon any secondary Grantee.

Subgrantees must comply with the same payment requirement as the Grantee and must comply with the requirements specified in the Grantee's subgrant award agreements.

DUPLICATION OF PROGRAMS:

FEMA will not provide assistance under the its programs for activities that it determines another Federal program has a more specific or primary authority to provide. FEMA also will not provide assistance for the applicant or subapplicant's legal obligations. FEMA may disallow or recoup amounts that duplicate other authorities.

DUPLICATION OF BENEFITS:

FEMA will not provide assistance under the program for activities that duplicate benefits received by or available to applicants, subapplicants and other project participants from insurance, other assistance programs, legal awards, or any other source to address the same purpose. Such individual or entity must notify the Grantee and FEMA of all benefits that it receives or anticipates from other sources for the same purpose, and must seek all such benefits available to them. FEMA will reduce the grant by the amounts available for the same purpose from another source. If FEMA provides assistance under this PDMC program when other benefits are available, the Grantee will be liable to FEMA for any duplicative amounts that are received from other sources, and must reimburse FEMA for such amounts. FEMA also will not provide assistance for the applicant or subapplicant's legal obligations, such as those imposed by a legal settlement, court order or State law.

NON DISCRIMINATION:

The program must be administered in an equitable and impartial manner, without discrimination on the grounds of race, color, religion, nationality, sex, age, or economic status. The program complies with Section 308 of the Stafford Act and Title VI of the 1964 Civil Rights Act and other applicable laws. All applicants/Grantees must comply with Title VI, including State and local governments distributing Federal assistance.

Applicants/Grantees and subapplicants/subgrantees will ensure that no discrimination is practiced. Applicants must consider fairness, equity, and equal access when prioritizing and selecting project subapplications to submit with their application. Subapplicants and subgrantees must ensure fairness, equity and equal access when consulting and making offers of mitigation to property owners that benefit from mitigation activities.

CHANGES IN SCOPE OF WORK:

Requests for changes to the SOW after award are permissible as long as they do not change the nature or total project cost of the activity, properties identified in the subapplication, the feasibility and effectiveness of the project, or the benefit cost ratio. Requests must be supported by adequate justification from the applicant in order to be processed. The justification is a description of the proposed change, a written explanation of the reason or reasons for the change; an outline of remaining funds available to support the change; and a full description of the work necessary to complete the activity. All approvals will be at FEMA's discretion, and there is no guarantee that SOW changes will be approved.

PERFORMANCE PERIODS:

Program/Project/subgrant Approval and/or Awards:

All grant award activities, including all projects and/or activities approved under each subgrant award, shall be completed within the time period prescribed and authorized on the obligating documents. All costs must be incurred within the approved performance period or be approved pre-award costs.

EXTENSIONS:

Requests for time extensions to the Performance Period will be considered but will not be granted automatically and must be supported by adequate justification submitted to the Regional Office in order to be processed. This justification is a written explanation of the reason or reasons for the delay; an outline of remaining funds available to support the extended Performance Period; and a description of performance measures necessary to complete the activity. Without justification, extensions requests will not be processed. Financial and progress reports must be current in order for a time extension to be considered.

RECOUPMENT OF FUNDS:

FEMA will recoup mitigation planning grant funds for grants that do not meet the deliverable criteria of an adopted, FEMA-approved mitigation plan by the end of the performance period.

RECOVERY OF FUNDS:

The Grantee will process the recovery of assistance paid to subgrantees processed through error, misrepresentation, or fraud or if funds are spent inappropriately. Recovered funds shall be submitted to FEMA as soon as the funds are collected, but no later than 90 days from the expiration date of the appropriate grant award agreement.

All fraud identifications will be reported to the FEMA Inspector General's office. The Grantee agrees to cooperate with investigation conducted by the FEMA Inspector General's office.

REFUND, REBATE, CREDITS:

The Grantee shall transfer to FEMA the appropriate share, based on the Federal support percentage, of any refund, rebate, credit or other amounts arising from the performance of this agreement, along with accrued interest, if any. The Grantee shall take necessary action to effect prompt collection of all monies due or which

may become due and to cooperate with FEMA in any claim or suit in connection with amounts due.

REPORTS:**Federal Financial Report (SF 425):**

The Grantee shall submit the Federal Financial Report (FFR) to the FEMA Regional Office within 30 days of the first Federal quarter following the initial grant award. The Grantee shall submit quarterly FFRs thereafter until the grant ends. Reports are due on January 30, April 30, July 30, and October 30. A report must be submitted for every quarter of the period of performance, including partial calendar quarters, as well as for periods where no grant activity occurs. Future awards and fund draw downs may be withheld if these reports are delinquent.

Performance Report:

The Grantee shall submit performance reports to the FEMA Regional Office within 30 days after end of each quarter. The report shall consist of a comparison of actual accomplishment to the approved activity objectives. The Regional Administrator may waive the initial report. The Grantee shall submit quarterly performance reports thereafter until the grant ends. Reports are due January 30, April 30, July 30, and October 30. Quarterly performance report shall report the name, completion status, expenditure, and payment-to-date of each approved activity/sub-grant award under the Grant Award.

Final Reports:

The Grantee shall submit a Final FFR and Performance Report 90 days after the end date of the performance period.

TERMINATION:

The Grantee, subgrantee, or FEMA may terminate grant award agreements by giving written notice to the other party at least seven (7) calendar days prior to the effective date of the termination. All notices are to be transmitted via registered or certified mail, return receipt requested. The Grantee's authority to incur new costs will be terminated upon the date of receipt of the notice or the date set forth in the notice. Any costs incurred up to the earlier of the date of the receipt of the notice or the date of termination set forth in the notice will be negotiated for final payment. Close out of the grant award will be commenced and processed as prescribed under Article VII. 3.

ARTICLE VIII - GOVERNING PROVISIONS

The Grantee and any sub-grantees shall comply with all applicable laws and regulations. A non-exclusive list of laws and regulations commonly applicable to FEMA grants is attached hereto for reference only.

The Grantee and any subgrantees shall also be bound by the Program Guidance document. The following Office of Management and Budget circulars are also applicable to this grant:

OMB Circular A-110 Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations

OMB Circular A-102 Uniform Administrative Requirements for Grants and Cooperative Agreements with State and Local Governments

OMB Circular A-87 Cost Principles for State and Local Governments

OMB Circular A-21 Cost Principles for Educational Institutions

OMB Circular A-102 Uniform Administrative Requirements for Grants and Cooperative Agreements with State and Local Governments

OMB Circular A-133 Audits of States, Local Governments, and Non-Profit Organizations

Commonly Applicable Statutes and Regulations

The Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93-288, as amended, 42 U.S.C. 5121 et seq., and Related Authorities

Sections 1361(A) of the National Flood Insurance Act of 1968 (NFIA, or "the Act"), 42 USC 4104c, as amended by the National Flood Insurance Reform Act of 1994 (NFIRA), Public Law 103-325 and the Bunning-Bereuter-Blumenauer Flood Insurance Reform Act of 2004, Public Law 108-264

Title 44 of the Code of Federal Regulations (CFR)

44 CFR Part 79-Flood Mitigation Grants

44 CFR Part 80-Property Acquisition and Relocation for Open Space

44 CFR Part 9-Floodplain Management and Protection of Wetlands

44 CFR Part 10-Environmental Considerations

44 CFR Part 13-Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments

31 CFR Part 205-Rules and Procedures for Funds Transfers

APPLICATION Grant application received by FEMA on 03-DEC-09.

Award Package (Part 3 of 3)

FEDERAL EMERGENCY MANAGEMENT AGENCY OBLIGATING DOCUMENT FOR AWARD/AMENDMENT

1a. AGREEMENT NO. EMP-2010-PC-0002	2. AMENDMENT NO. 0	3. RECIPIENT NO. 54-6002286	4. TYPE OF ACTION STD	5. CONTROL NO. P100246N
6. RECIPIENT NAME AND ADDRESS Virginia Department of Emergency Management 10501 Trade Court , Richmond VA , 23236-0000	7. ISSUING FEMA OFFICE AND ADDRESS FEMA Region III 615 Chestnut Street , 615 Chestnut Street Philadelphia, PA - 19106 Specialist:JOHN SCHMIERER	8. PAYMENT OFFICE AND ADDRESS		
9. NAME OF RECIPIENT PROJECT OFFICER George Roarty	PHONE NO. 804-897-6500	10. NAME OF FEMA PROJECT COORDINATOR JOHN SCHMIERER	PHONE NO.	
11. EFFECTIVE DATE OF THIS ACTION 09-10-2010	12. METHOD OF PAYMENT H	13. ASSISTANCE ARRANGEMENT S	14. PERFORMANCE PERIOD From:09-30-2010 To:09-30-2013	
			Budget Period From:	To:
15. DESCRIPTION OF ACTION a. (Indicate funding data for awards or financial changes)				
PROGRAM NAME ACRONYM	CFDA NO.	ACCOUNTING DATA (ACCS CODE)	PRIOR TOTAL	AMOUNT AWARDED THIS
			CURRENT TOTAL AWARD	CUMMULATIVE NON-

		XXXX-XXX-XXXXXX- XXXXX-XXXX-XXXX-X	AWARD	ACTION + OR (-)		FEDERAL COMMITMENT
PDMC	97.047	2010-69-5760RB- 9032-4101-D	\$0.00	\$584,820.45	\$584,820.45	\$194,940.50
		TOTALS	\$0.00	\$584,820.45	\$584,820.45	\$194,940.50

b. To describe changes other than funding data or financial changes, attach schedule and check here.

No

16 a. FOR NON-DISASTER PROGRAMS: RECIPIENT IS REQUIRED TO SIGN AND RETURN THREE (3) COPIES OF THIS DOCUMENT TO FEMA (See Block 7 for address)

16b. FOR DISASTER PROGRAMS: RECIPIENT IS NOT REQUIRED TO SIGN

This assistance is subject to terms and conditions attached to this award notice or by incorporated reference in program legislation cited above.

17. RECIPIENT SIGNATORY OFFICIAL (Name and Title)

Signed by **George Roarty GRANTEE**

DATE

09-15-2010

18. FEMA SIGNATORY OFFICIAL (Name and Title)

Signed by

DATE

Appendix 4.4
January 25, 2011
Meeting Minutes

From: Philipp Gabathuler [<mailto:pgabathuler@region2000.org>]
Sent: Tuesday, January 25, 2011 3:09 PM
To: Messmer, Debbie; Coates, Robert
Cc: White, Bob (DHCD)
Subject: R2K Hazard Mitigation Plan Update

All,

Thank you for coming to the Region 2000 office to discuss the HM plan update. I gained a better understanding of the next steps for our update process. The following is a summary of the meeting and the items we need from each other to get started:

1. **Discussion of updated plan's layout:** Robbie mentioned that there is a document with links to all the sources of the various maps used for Hazard Mitigation Plans. I look forward to receiving this document as it will assist in inventorying what we already have.

Maps in the original HMP document that have updated data since 2006 will be changed and changes will be mentioned in an appendix. Maps in the document that don't have new data since 2006 will remain the same and a note will be added in the appendix as to why it hasn't been updated.

In the 2006 Plan, the HAZUS extension for ArcGIS Desktop was used for calculating building exposure and damage cost. Learning this software extension will be essential for updating tables for the new plan. Notes will be added in an appendix for the tables that have been updated and those that remained unchanged. Robbie, could you send me the link for the HAZUS download site?

An introduction should be added to the beginning of each chapter in the updated plan that describes if/how it has changed. Contact with local officials and updated data from NCDC and other sources will reveal events that have occurred since 2006 and will be the basis for these introductions.

2. **Public outreach effort:** FEMA requires one advertised public meeting for the update process, but it was mentioned that a good practice was to have one public meeting following the HIRA process and one following the Final Draft phase.

Involving each locality means having meetings with local officials and publicizing the update process in an appropriate manner: newspaper, town hall meeting agenda, etc.

Involving academia is also something FEMA requires where applicable. Region 2000 has several academic institutions which should be contacted about the update process in an appropriate manner. Contact with academic institutions will most likely be addressed by adding them the Region 2000 monthly newsletter recipients list.

3. **Goals and strategies section:** FEMA requires that a minimum of 1 new regional strategy arise in the plan update process. Discussion with local officials on eligible future projects could increase input for this section.

Discussing project rankings will also be important for updating this section.

4. **Budget and scheduling:** I will be working on the budget worksheet this week and get it out for review at the beginning of February.

Debbie, could you send me the scheduling crosswalk as well as the milestones table for a HMP update?

I am really looking forward to getting the ball rolling on this project!

Thanks,

Philipp

Appendix 4.5

May 5, 2011 Meeting

Agenda



HAZARD MITIGATION PLAN

UPDATE PROCESS

MAY 5, 2011 10 AM AGENDA

1. Introductions
2. Overview of time table/scope of work (Philipp Gabathuler—Region 2000):
 - Time table (Attachment A)
 - This project includes
 - A. Identifying hazards that have occurred since the 2006
 - B. Calculating data on estimated losses
 - C. Identifying repetitive loss properties and properties at risk
 - D. Updating land use data, critical facilities, hazard areas such as flood zones, and other relevant assets and facilities in the region based on information from local comprehensive plans and other plans—(Attachment B)
 - E. Using GIS mapping to outline areas that are most vulnerable to natural hazards.
 - Region 2000 Staff will also facilitate the review and update of mitigation strategies through involvement with public and private entities in the Region.
3. Billing: The Pre-Disaster Mitigation (PDM) Grant Program funded through the Federal Emergency Management Agency requires a 75% federal and 25% non-federal cost share. The non-federal cost share will be fulfilled by the participating localities' cash contribution.

Amherst Co.	\$2,403.69
Appomattox Co.	983.31
Bedford Co.	5,348.40
Campbell Co.	3,862.30
Bedford City	486.60
Lynchburg	5,711.53
Altavista	200.00
Amherst Town	200.00
Appomattox Town	200.00
Brookneal	200.00
Pamplin	200.00
4. Overview of the Hazard Mitigation Plan Update process (Debbie Messmer, Robbie Coates—VDEM).
 - A. FEMA Presentation
 - B. Review examples of mitigation strategies to better prepare the participating localities for the risks associated with the hazards addressed in the plan.
 - C. Hazard Mitigation Grants discussion
5. Next Steps

Attachment A: Project Schedule

Description of Task	Starting Point	Duration	Meeting with PMT
Establish Mitigation Plan Project Management Team (PMT) (key stakeholders)	July 1, 2011	30 days	YES
Review current plan and identify data requirements	August 1, 2011	30 days	
Meet with PMT to go over process, timeline for completion	September 1, 2011	1 day	YES
Hazard Identification and Risk Assessment (HIRA)	September 1, 2011	60 days	
Present findings of HIRA to PMT for review/comment	November 1, 2011	1 day	YES
Presentations to local governing bodies/other public groups to promote awareness and solicit feedback	November 1, 2011	45-90 days	
Capability assessment and mitigation strategy development	February 1, 2012	45 days	
Set goals for mitigation strategies and review mitigation activities	March 1, 2012	1 day	YES
Print draft mitigation plan	March 15, 2012	15 days	
Comprehensive plan review by local Planning Commissions/Governing Bodies	April 1, 2012	90 days	
Print revised mitigation plan	July 1, 2012	15 days	
Preliminary Plan Review by VDEM	July 15, 2012	30 days	
Plan review and FEMA conditional approval pending adoption	August 15, 2012	60 days	
Public hearings/Mitigation Plan adoption by Local Governing Bodies	October 15, 2012	90 days	
Final Mitigation Plan approval	January 15, 2013	30 days	
Finalize project, print and distribute final copies	February 15, 2013	15 days	
Estimate the total duration of the proposed activity:			20 MONTHS

Attachment B: List of Figures for Hazard Mitigation Plan

Section	Page	Name	Layer	Source	Availability
III	2	Regional Map	General		
V	5	Region 2000 RC Boundaries	General		
V	6	Region 2000 Watershed	Watersheds (Chowan, James, Roanoke River Basins)	VT CGIT, Region 2000 RC, ESRI, NWS HHD)	
			Streams/Rivers	VT CGIT, Region 2000 RC, ESRI, NWS HHD)	
V	7	Region 2000 Critical Facility Locations	Critical facilities	VT CGIT, Region 2000 RC, ESRI, FEMA HAZUS-MH)	
V	21	VA Avg. # of days with Snowfall > 1 inch	HI/LO	NOAA VAView PRISM	
V	22	Region 2000 RC Avg. # of Days with Snowfall >1 inch	3 Days/14 Days	VDOT, Region 2000, ESRI, VAView PRISM	
V	24	Virginia Hazardous Winter Weather Potential Based on LEQ Precipitation	Type of precip (Snow, Ice, Rain, etc.)	NOAA VAView PRISM	
V	25	Region 2000 RC Hazardous Winter Weather Potential Based on LEQ Precipitation	Type of precip (Snow, Ice, Rain, etc.)	NOAA VAView PRISM, VT CGIT, Region 2000 RC, ESRI	
V	26	Lynchburg City Steep Slope Locations (>15%)	Steep roads (>15%)	VDOT, Region 2000 RC, ESRI	
			Roads	VDOT, Region 2000 RC, ESRI	
V	28	Region 2000 RC Snowfall Relative Risk	Snow potential by census block	VT CGIT, Region 2000 RC, ESRI, VAView Prism	
V	29	Region 2000 RC Ice Relative Risk	Ice potential by Census Block	VT CGIT, Region 2000 RC, ESRI, VAView Prism	
V	39	Region 2000 RC FEMA designation Floodplains	FEMA Flood Zones	VT CGIT, ESRI, Region 2000 RC, VDOT, FEMA FIRMs	
			Major Water Bodies	VT CGIT, ESRI, Region 2000 RC, VDOT, FEMA FIRMs	
			Streams/Rivers	VT CGIT, ESRI, Region 2000 RC, VDOT, FEMA FIRMs	
V	51	Region 2000 RC Dam Inventory Hazard Potential	Dam Hazard Potential (Low, Significant, High)	VT CGIT, Region 2000 RC, ESRI, VA DCR, NDI	
V	46	Region 2000 RC Flood Losses by Census Block	N/A (Does not show up in hard copy of plan)	-	
V	55	Region 2000 RC Drought Vulnerability	Vulnerability by Census Blck Group (Low, Mod, Hi)	VT CGIT, Region 2000 RC, ESRI, 1990 US Census	
V	58	Hurricane Tracks in Virginia	Type of storm (Tropical depression, storm, hurricane)	Tropical Storm History USGS, National Weather Service Tropical Prediction Center, National Hurricane Center	
V	64	Annualized Hurricane Wind Losses	Loss by Census Track	VT CGIT, Region 2000 RC, ESRI, FEMA HAZUS-MH)	
V	70	Region 2000 RC- Tornado Touchdowns	Magnitude	VT DOT, Region 2000 RC, ESRI, NCDC	
V	73	Region 2000 RC Wildfire Vulnerability	Wildfire Vulnerability (Lo, Med, Hi)	VT CGIT, Region 2000 RC, ESRI, VA DOF	
V	75	USGS Landslide susceptibility and incidence in Virginia	Susceptibility of landslide hazards	USGS National Landslide Map, VT CGIT	
			Incidence of landslide hazards	USGS National Landslide Map, VT CGIT	
V	76	Karst Regions in Virginia	Karst regions	USGS Aquifer Map, VT CGIT	

Appendix 4.6

May 5, 2011 Meeting Minutes

May 5

Kickoff Meeting

Hazard Mitigation Plan Meeting Minutes

1. What is the plan about?

HMP represents jurisdictions' commitment to reduce risk from Natural Hazards, serving as a guide for decision makers as they commit resources to reducing the effects of natural hazards.

Hazard mitigation is any sustained action taken to reduce or eliminate long term risk to life, property and the economy from a natural hazard event.

States and local governments are required to adopt a HMP to qualify for pre & post disaster mitigation funding (Hazard Mitigation Grant Program).

2. How is plan set up?

1. Community Descriptions: Provides information on the geography and demographics of the region.
2. Planning Process: provides information on the makeup of the steering committee members, meetings for the committee members and public, and the steps taken to complete and adopt the mitigation plan.
3. Hazard Identification and Risk Assessment (HIRA) provides detailed descriptions and maps on how the region is impacted by various natural and man-made hazards.
4. Capability and Mitigation section provides information on each community's rankings of mitigation actions and the capability to implement individual mitigation actions.
5. Plan Maintenance: provides information on the region's ability to maintain and update the plan.
6. References: provides a listing of the different resources used in the development of this plan.
7. Appendices: provides the figures, tables and reports that are referenced in the body of the plan.

Appendix 4.7
Newspaper
Advertisement for
Public Comment

The News & Advance

Lynchburg News & Advance Order Confirmation for Ad #0002471410-01

Client	REGION 2000 REGIONAL COMM.	Payor Customer	REGION 2000 REGIONAL COMM.	Acct. Exec	
Client Phone	434-845-3491	Payor Phone	434-845-3491		cmarsh
Account#	3312739	Payor Account	3312739		
Address	828 MAIN ST,12TH FLOOR LYNCHBURG VA 24504-1522 USA	Payor Address	828 MAIN ST,12TH FLOOR LYNCHBURG VA 24504-1522	Ordered By	MGILLEY
Fax	434-845-3493				
EMail	mgilley@region2000.org				

Ad Content Proof Actual Size



Local
Government
Council

Region 2000 Hazard Identification and Risk Assessment Draft available for Public Comment

The Region 2000 Hazard Identification and Risk Assessment section for the Region 2000 Hazard Mitigation Plan Update is now open for a 30-day public comment period. Public input on this section of the plan is important, and residents are highly encouraged to review the section and offer comments. The formal comment period will close December 1, 2011. The Region 2000 Hazard Mitigation Plan Update draft can be viewed in its entirety at www.region2000.org/hazard-mitigation-homepage.html. The plan is also available for review at the Region 2000 Local Government Council office located at 828 Main Street, 12th Floor, Lynchburg, Virginia.

Mitigation planning is the process state and local governments use to identify risks and vulnerabilities associated with natural hazards and to develop long-term strategies for protecting people and property from the effects of future hazard events. The mitigation planning process involves identifying and profiling natural hazards that will most likely occur, as well as assessing the vulnerability of people, critical facilities and structures. The plan identifies the region's mitigation strategy, which helps guide local mitigation planning and project efforts.

For more information or to provide comments, please contact Philipp Gabathuler, Planner, Region 2000 Local Government Council, 828 Main Street, Lynchburg, VA 24504-1522. pgabathuler@region2000.org. Ph. 434-845-5678 ext. 217.

Total Amount	\$193.50	Status		Materials	
Payment Amt	\$0.00	Tear Sheets	1	Proofs	0
Amount Due	\$193.50			Affidavits	0
				PO Number	
				Blind Box	

Payment Method

Confirmation Notes:

Text: Hazard Identification and Risk Assessment Draft for Public Comment

Order Notes:

Ad Number	Ad Type	Color	Production Color
0002471410-01	CLP Legal Liner	<NONE>	

Pick Up Number	Ad Size	Production Method	Production Notes
	1.0 X 45 Li	AdBooker (liner)	

Product	Placement/Class	Position	# Inserts
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Run Schedule Invoice Text

Run Dates

Tag Line

LYN News and Adv CLP::	_Legal Ads - CLP	_Legal Notices-Legal-CLP	1
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HAZARD IDENTIFICATION AND RISK ASSESSMENT DRAFT FOR PUBLIC

11/2/2011

HAZARD IDENTIFICATION AND RISK ASSESSMENT DRAFT FOR PUBLIC

Section V

Appendix

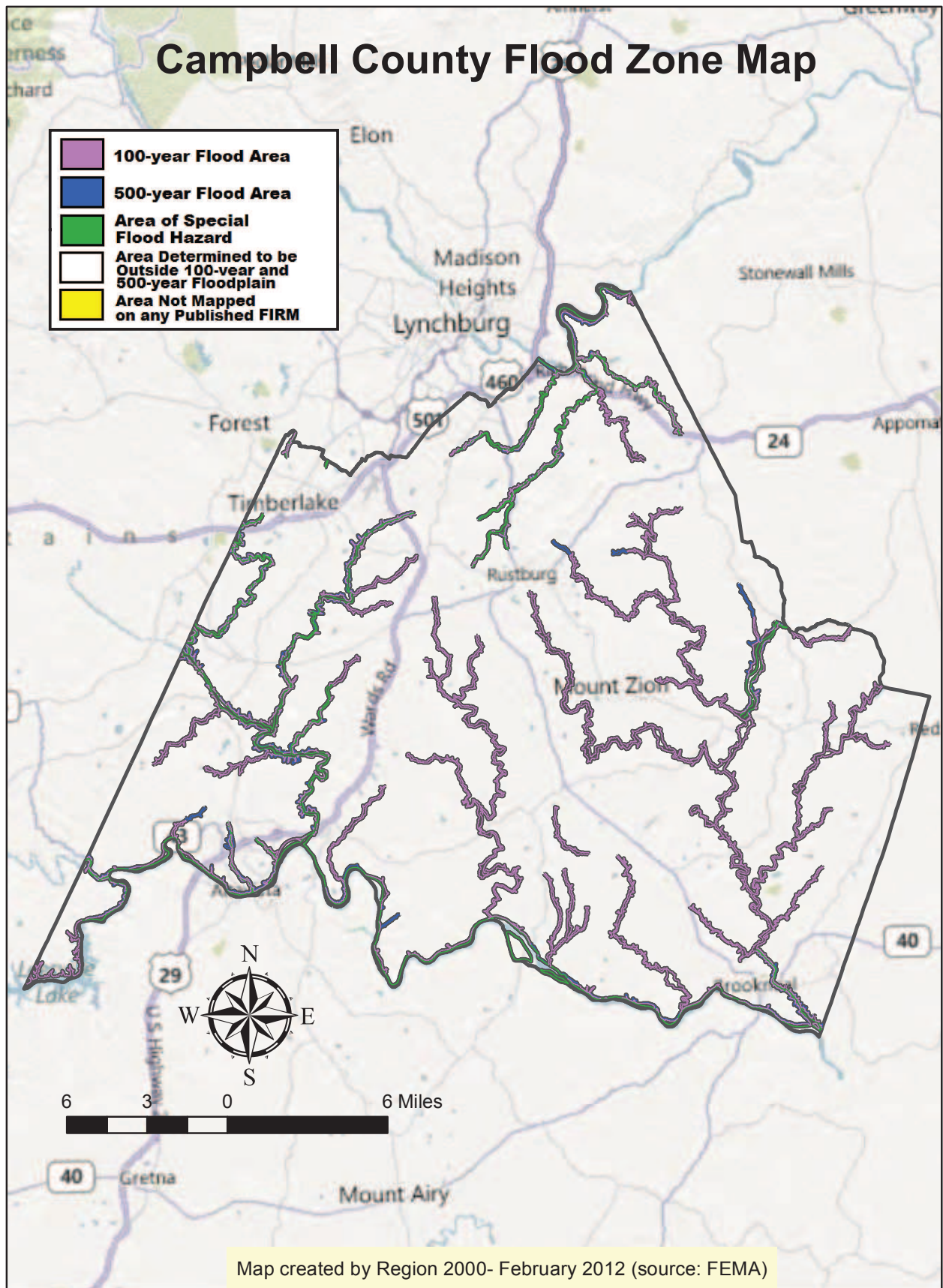
Hazard Identification and Risk Assessment (HIRA)



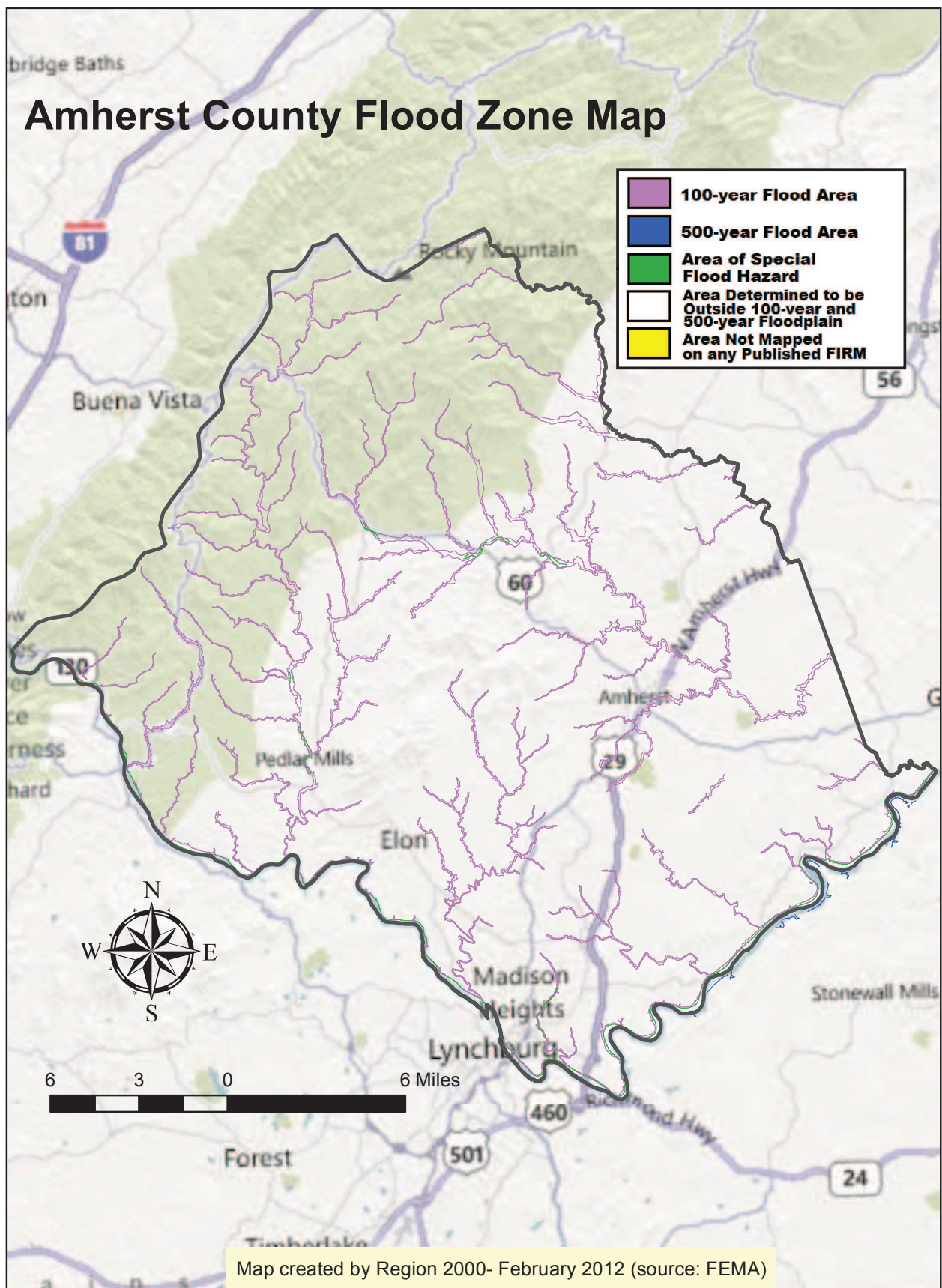
Appendix 5.1

Flood Maps

Campbell County Flood Zone Map



Amherst County Flood Zone Map



Appomattox County Flood Zone Map

This map displays the flood zones for Appomattox County, Virginia. The legend identifies four categories: 100-year Flood Area (purple outline), 500-year Flood Area (blue outline), Area of Special Flood Hazard (green outline), and Area Determined to be Outside 100-year and 500-year Floodplain (white). A yellow area represents regions not mapped on any published FIRMS. The map includes major roads like US-60, US-24, and US-460, and towns such as Appomattox, Spout Spring, and Gladstone. A compass rose and a 4-mile scale bar are provided for orientation and measurement.

Legend:

- 100-year Flood Area
- 500-year Flood Area
- Area of Special Flood Hazard
- Area Determined to be Outside 100-year and 500-year Floodplain
- Area Not Mapped on any Published FIRMS

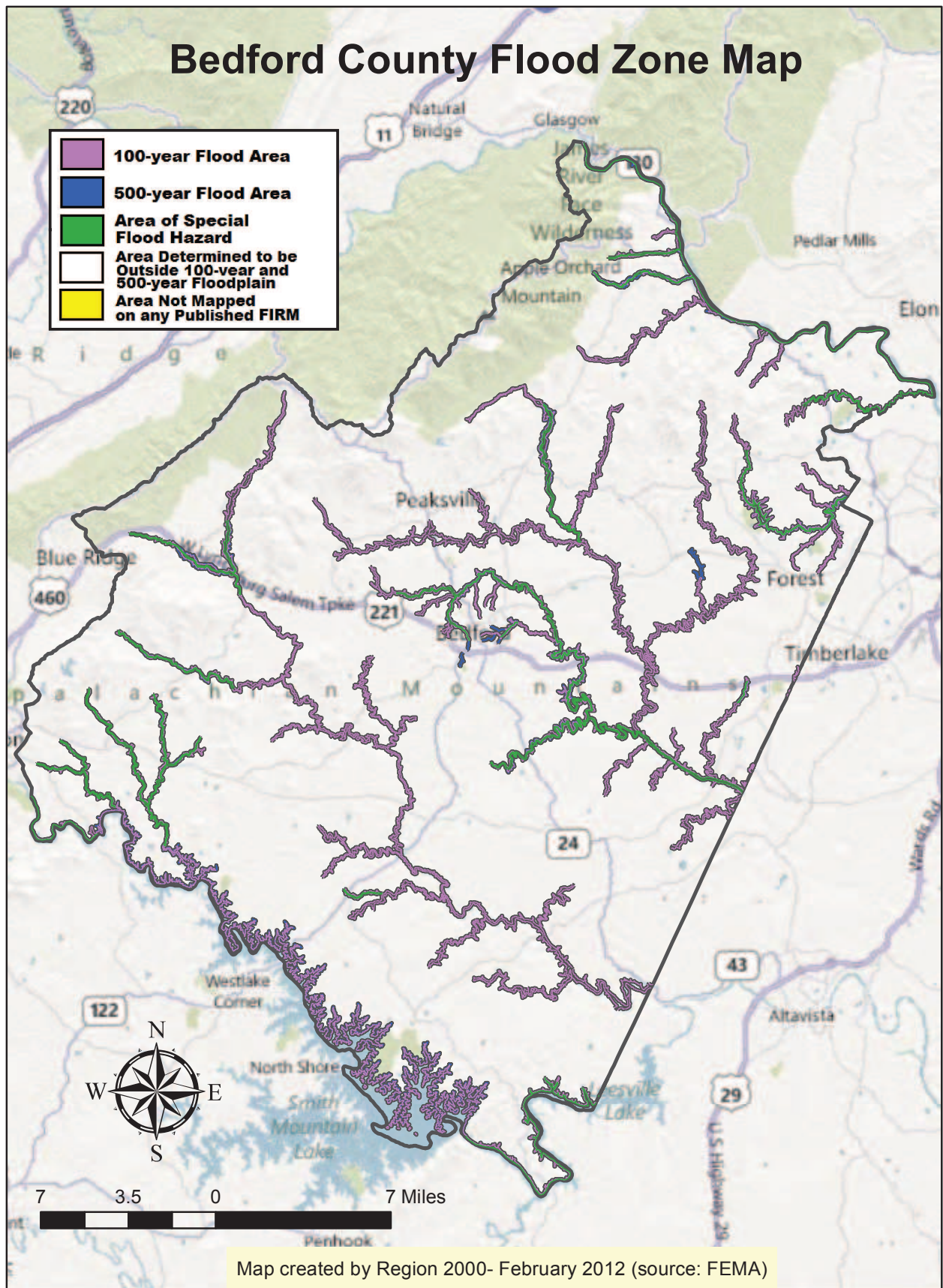
Map Features:

- Major Roads: US-60, US-24, US-460, US-630, VA-47, VA-56, VA-28, VA-29, VA-30, VA-31, VA-32, VA-33, VA-34, VA-35, VA-36, VA-37, VA-38, VA-39, VA-40, VA-41, VA-42, VA-43, VA-44, VA-45, VA-46, VA-47, VA-48, VA-49, VA-50, VA-51, VA-52, VA-53, VA-54, VA-55, VA-56, VA-57, VA-58, VA-59, VA-60, VA-61, VA-62, VA-63, VA-64, VA-65, VA-66, VA-67, VA-68, VA-69, VA-70, VA-71, VA-72, VA-73, VA-74, VA-75, VA-76, VA-77, VA-78, VA-79, VA-80, VA-81, VA-82, VA-83, VA-84, VA-85, VA-86, VA-87, VA-88, VA-89, VA-90, VA-91, VA-92, VA-93, VA-94, VA-95, VA-96, VA-97, VA-98, VA-99, VA-100.
- Towns: Appomattox, Spout Spring, Gladstone, Beckham, Sliders, Vere, Hollywood, Appomattox, Spout Spring, Concord, Sherwin, Spring Mills, Chap, Red House, Madisonville, Hixburg, Shields, Elam, Darling Heights, Madisonville, Hixburg, Shields, Elam, Darling Heights.
- Scale: 0 to 4 Miles.
- Compass Rose: N, S, E, W.

Map created by Region 2000- February 2012 (source: FEMA)

Map created by Region 2000- February 2012 (source: FEMA)

Bedford County Flood Zone Map



City of Lynchburg Flood Zone Map

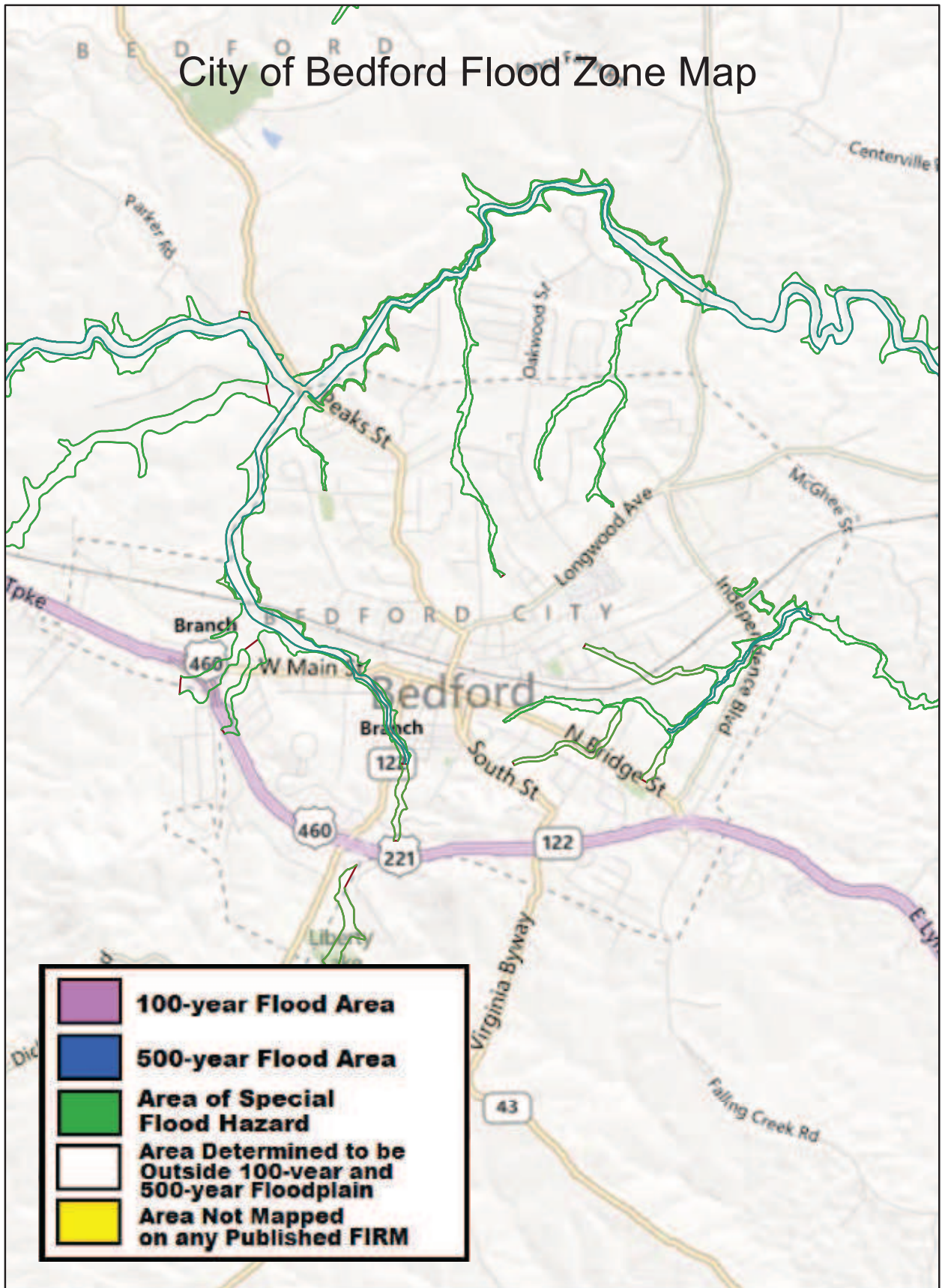
Legend:

- 100-year Flood Area
- 500-year Flood Area
- Area of Special Flood Hazard
- Area Determined to be Outside 100-year and 500-year Floodplain
- Area Not Mapped on any Published FIRM

Map created by Region 2000- February 2012 (source: FEMA)

Map created by Region 2000- February 2012 (source: FEMA)

City of Bedford Flood Zone Map



Appendix 5.2

Historical Weather

Occurrences

Historical Wind Occurrences In Region 2000 (Includes Hurricanes/Tornadoes)



1950-2011

Primary Sources: National Oceanic and Atmospheric Administration, Historical Society (Newspapers)

Date	Damages
February 1, 1951	Appomattox County: Miniature twister struck and demolished an Appomattox farm.
May 14, 1976	A strong line of thunderstorms produced several small tornadoes in the region. Amherst County: A small tornado along Old Winesap Road took the roof off of one home; one mobile home was knocked off its foundation; tree limbs were downed. No injuries were reported.
March 21, 1984	Campbell County: Touched down in Altavista and remained on the ground for 3/4 of a mile, clearing a path 200 yards wide.
March 22, 1984	A severe thunderstorm passed through the region in the middle of the night with high winds and one tornado. Town of Altavista: A minor tornado touched down for three-quarters of a mile and cleared a path 200 yards wide. The tornado destroyed a barn, two sheds, two campers, and several fence lines. No injuries were reported. Bedford County: About 500 customers lost power. Campbell County: Roads were littered with over 40 downed trees
July 9, 1990	Amherst County: A tornado touched down near Pleasant View farm. Minor damage to one house and barn were reported, with no injuries.
June 10, 1996	A severe thunderstorm whipped through the south end of Campbell County Monday, with tornadoes touching down in Henry and Pittsylvania County. A tornado ripped the roof off a house on Virginia route 640. Campbell County: Staunton River reached a crest of about 18 feet. A funnel cloud was also sighted near William Campbell High School.
July 15, 1996	A fierce storm, possibly a tornado, whipped through the City of Bedford and the surrounding areas Monday afternoon, damaging several homes. Bedford City: Damage reported in the vicinity of Macon and Peaks Streets, and Lake and Whitfield Drives. House damaged on Rough Drive. A tornado caused damage near Stewartsville and near a saw mill north of US 460. Damages from the storm were estimated at \$200,000.

Date	Damages
April 17, 2000	<p>Thunderstorms during the late morning through evening of the 17th generated a tornado, and produced hail up to one and three quarter inches in diameter, damaging winds, flash flooding, and lightning damage. A tornado briefly touched down in a field in Gladys. No damage was reported. Lightning struck a house 2 miles north of Altavista, starting a fire that burned to house to the ground. A second house in Brookneal was struck by lightning starting a fire that caused minor damage.</p> <p>Campbell County: A tornado briefly touched down in a field west of Gladys, no damage was reported. A house in Brookneal was struck by lightning, starting a fire that caused minor damage.</p> <p>Altavista: The storm drove into the southwestern portion of the county, pelting Altavista with dime-sized hail and carrying showers and thunderstorms into the north of the County. Lightning struck a house 2 miles north of Altavista, starting a fire that burned the house to the ground.</p>
April 28, 2002	<p>Two tornadoes swirled through Bedford and Campbell counties damaging hundreds of homes and businesses, knocking down power lines and injuring several people. More then 200 homes, 6 businesses, 2 churches damaged and 20 recreational vehicles damaged.</p> <p>Bedford County: Damages estimated over 6 million dollars.</p> <p>Bedford City: Estimated 1.6 million dollars in damage. 130 homes affected, 12 mobiles destroyed and 8 single family homes destroyed.</p> <p>Campbell County: Damages estimated at over 2.75 million dollars. Damages included 15 homes, 3 businesses and 1 church destroyed.</p>

City of Lynchburg Wind Occurrences (Hurricane/Tornado) since 2006

Date	Description
6/8/2007	A large tree was blown down. Severe thunderstorms produced wind damage and hail up to the size of quarters across portions of southwest Virginia.
7/19/2007	Thunderstorm winds blew down several large trees on Thomas Road and Brandon Road. Damage values are estimated. In advance of an approaching cold front, thunderstorms developed during the afternoon hours of the 19th. Some of these increased to severe levels producing damaging winds with numerous reports of trees being blown down and hail ranging from nickel to quarter size.
7/19/2007	Thunderstorm winds blew down limbs that were five to six inches in diameter. Damage values are estimated. In advance of an approaching cold front, thunderstorms developed during the afternoon hours of the 19th. Some of these increased to severe levels producing damaging winds with numerous reports of trees being blown down and hail ranging from nickel to quarter size.
8/21/2007	Trees were blown down. A frontal boundary to the northeast, kept an unstable environment over the area during the afternoon of August 21st. An upper disturbance passed overhead which helped to trigger numerous thunderstorms. Some of these storms were severe with damaging winds and large hail.
11/15/2008	A large tree was blown down at the corner of 5th and Taylor street in downtown Lynchburg. A cold front swept across Virginia November 15th. Strong southerly winds ahead of the front helped bow out a line of thunderstorms, which brought damaging winds to the ground over portions of the Virginia piedmont late on the morning of the 15th.
5/12/2010	A large tree was blown down by thunderstorm winds. As it fell, it knocked down power lines and bent a power pole. The tree came to rest on the porch of a house. Damage values are estimated. A broad region of thunderstorms progressed through the region. Some of these storms reached severe criteria and producing damaging winds.
5/12/2010	Trees were blown down by thunderstorm winds near the intersection of Campbell Avenue and Kemper Street. Damage values are estimated. A broad region of thunderstorms progressed through the region. Some of these storms reached severe criteria and producing damaging winds.
6/12/2010	A large tree was blown down on a sidewalk at Alexander and Biltmore. Damage amounts are estimated. Other reports of trees down on multiple city roads as well as thousands of power outages. Two thunderstorm complexes moved around a ridge centered over the southeastern states and into Virginia. The first complex strengthened when it moved east of the Blue Ridge and produced widespread wind damage. The second complex arrived in the evening and produced flash flooding across the mountain empire of Virginia.
6/16/2010	Trees were blown down on Williams Road. Damage amounts are estimated. A cold frontal approaching along with a lee trough provided enough low level convergence for scattered thunderstorms to develop. Enough instability was present for a few of these storms to become severe producing damaging winds.

City of Lynchburg Wind Occurrences (Hurricane/Tornado) since 2006

Date	Description
9/22/2010	Thunderstorm winds blew multiple trees down at the 2100 block of Old Forest Road. Damage values are estimated. A very unstable atmosphere with plenty of potential for strong downdrafts of wind existed across the the region. Strong thunderstorms formed during the late afternoon and lasted into the early evening. Several of these storms realized the potential for the damaging winds and resulted in the downing of numerous trees.
4/5/2011	Thunderstorm winds blew down power lines and trees across the city. The roof of Depot Grille was partially torn off by the winds as well. A strong upper level low pressure system and cold front moved across the region on the night of the 4th into early on the 5th of April. A line of showers and thunderstorms accompanied this front. This line intensified as it approached the Blue Ridge and entered into an area of higher instability. This intensification resulted in areas of wind damage, mainly along and east of the Blue Ridge.
6/12/2011	Numerous trees were blown down within a two mile swath. Many were blown down on Mayfield Drive and others were blown down on Gaddy Road, and within an apartment complex off Lakeside Drive near the intersection with Route 501. Damage values are estimated. Scattered showers and storms accompanied the passage of a cold front. Some of these storms increased to severe levels with damaging winds and large hail in areas along and east of the crest of the Blue Ridge.
6/18/2011	Thunderstorm winds knocked a six inch diameter limb off a tree and onto power lines at the 3200 block of Forest Brook Road. Damage values are estimated. Thunderstorm complexes moved southeast from Kentucky into Tennessee. Outflow boundaries from these complexes moved eastward into Virginia and touched of showers and storms. Some of these storms increased to severe levels and produced damaging thunderstorm winds.
6/28/2011	Thunderstorm winds blew trees down across the City of Lynchburg. Damage values are estimated. A cold front swept through the region on the 28th. Multiple clusters of storms accompanied the front as it progressed. Some of these storms increased to severe levels and produced large hail and damaging winds.

Amherst County Wind Occurrences (Hurricane/Tornado) since 2006

Date	Description
5/21/2004	Severe thunderstorms on the afternoon and evening of May 21st from the Roanoke Valley south to Southside Virginia produced hail up to the size of golf balls and destructive winds that toppled trees and power and telephone lines.
6/11/2004	Scattered severe storms on the afternoon of the 11th produced damaging winds. Reports of trees down were common. One microburst event at a marina in Pulaski County downed 8 trees and one power pole. The fallen trees caused damage to a boat shelter and boats.
4/3/2005	Deep closed upper level low and associated surface low passed directly over southwest Virginia on April 2nd. The surface low deepened significantly as it exited and headed northeast. Unusually strong low level winds developed in the deep, cyclonic flow in the storm's wake. The strongest wind gusts topped out in the 50 to 56 kt range for at least a one hour time frame. The winds caused widespread (mostly tree and powerline) damage over the favored high (cross-mountain flow) wind locations. Wet soil conditions likely aggravated the tree damage. There were also a few reports of structural damage (mainly roof and siding damage).
8/16/2005	Tree down. A weak frontal boundary stalled just north of the area, with impulse working southeast into a highly unstable atmosphere, brought scattered severe thunderstorms to Western Virginia during the afternoon and evening of the 16th.
1/14/2006	A cold front passed across Virginia in the early morning hours of the 14th. After sunrise, winds increased and very strong gusts during the day resulted in numerous reports of trees down, many power lines down, power outages, signs blown down or bent, and some structural damage from trees falling on buildings, and shingles being blown off roofs.
4/3/2006	Numerous severe thunderstorms developed in the unstable air the afternoon of the 3rd in advance of an approaching cold front. Severe wind gusts downed trees and some powerlines in many locations.
4/7/2006	A line of severe thunderstorms progressed across the area the evening of the 7th in association with a cold front. Numerous reports of both damaging winds around 60 to 75 mph downing trees and/or power lines and large hail were common with these storms as they moved through the region. Additional severe storms formed behind the main line of storms later in the evening across far southwest Virginia.
6/23/2006	Thunderstorm winds downed several large trees along the Blue Ridge Parkway near Peaks of Otter. The Public Safety Director of Amherst reported 20-30 trees downed by thunderstorm winds in Amherst county. There was an isolated strip about 3/4 mile long of 2 foot diameter trees downed.
6/28/2006	Thunderstorm winds downed several trees 1 mile southeast of Goode in Bedford county. A severe thunderstorm produced penny sized hail 2 miles east of Blacksburg. Thunderstorm winds downed numerous trees along the Blue Ridge Parkway near the Virginia 130 Intersection. A stop sign was also uprooted from the ground.

Amherst County Wind Occurrences (Hurricane/Tornado) since 2006

Date	Description
7/19/2006	Thunderstorms began developing during the afternoon hours of the 19th due primarily to daytime heating in an already unstable atmosphere. Some of these increased to severe levels, producing both damaging wind gusts, and large hail. As evening arrived, severe storms continued to be a treat thanks to the approach and then arrival of a dying meso-scale convective complex that moved out of the Ohio Valley and into our region. Again, damaging wind gusts, and large hail resulted from these severe storms.
7/20/2006	Afternoon thunderstorms developed across parts of the the region. Some of these storms produced damaging winds in the 60 to 70 mph range, downing some trees.
12/1/2006	Two trees downed near Madison Heights. A strong cold front swept east across the Appalachians on the 1st of December resulting in gusty west winds.
2/14/2007	Trees down at Peaks of Otter. Northwest winds behind a departing winter storm off the Virginia coast gusted over 60 mph and brought trees down across portions of southwest Virginia.
4/16/2007	Trees were blown down countywide. A very strong pressure gradient developed as a vigorous area of low pressure moved northeast from the North Carolina coast to off the Long Island coast developing into a nor'easter and high pressure progressed into the area from the midwest. Trees and power lines were knocked down as a result of the strong winds which were common across the region. There was also some minor damage to some structures. Most areas experienced wind gusts between 50 and 60 mph...with isolated wind gusts approaching 70 mph.
5/12/2007	Two large trees blown down, along with numerous branches. Severe thunderstorms developed along the foothills in Virginia during the afternoon and evening of May 12th. The storms brought hail up to the size of golf balls and wind damage.
6/8/2007	Severe thunderstorms produced wind damage and hail up to the size of quarters across portions of southwest Virginia.
6/19/2007	The roof of home was damaged and large trees were uprooted. Severe thunderstorms produced wind damage and hail up to the size of quarters.
6/19/2007	Four to five trees down on Highway 60 East. Severe thunderstorms produced wind damage and hail up to the size of quarters.
6/25/2007	Numerous large tree limbs down. Severe thunderstorms created wind damage and hail up to penny sized.
8/16/2007	Penny sized hail fell 15 miles west of Amherst. Scattered severe thunderstorms developed ahead of a cold front during the afternoon of August 16th. These storms brought damaging winds and large hail from the southern Shenandoah Valley east into the Virginia piedmont.
8/19/2007	A severe thunderstorm produced penny sized hail 5 miles east of Alto, VA. A severe thunderstorm produced penny sized hail over northern Amherst County, VA, August 19th.

Amherst County Wind Occurrences (Hurricane/Tornado) since 2006

Date	Description
8/21/2007	Trees were blown down. A frontal boundary to the northeast, kept an unstable environment over the area during the afternoon of August 21st. An upper disturbance passed overhead which helped to trigger numerous thunderstorms. Some of these storms were severe with damaging winds and large hail.
4/26/2008	A cold front moved through the area bringing with it showers and thunderstorms. Some of the storms produced large hail and damaging winds.
6/7/2008	Two four-inch diameter tree limbs were blown down by thunderstorm winds. Outflow boundaries from earlier showers and thunderstorms interacted with a warm, moist and unstable air mass to trigger severe thunderstorms. These storms produced damaging winds and large hail on June 7.
6/27/2008	Several trees were blown down by thunderstorm winds on Ned Brown Road. The trees fell into power lines resulting in an electrical fire. Damage values are estimated.
2/12/2009	High winds blew down trees between Lowesville and Piney River. Trees were also blown down along Highway 29 south of Amherst.
2/10/2010	Strong northwest winds behind a strengthening coastal low brought down a tree in the Pedlar Mills area and scattered trees throughout the rest of the county.
2/26/2010	A tree was reported down on Route 151 due to high winds.
5/12/2010	A tree was blown down on Waughs Ferry Crossing near Route 130. Damage values are estimated.
5/12/2010	A tree was blown down on High Peak Road. Damage values are estimated.
5/14/2010	A cold front approached the region during the day and passed through the evening hours. Storms developed along and ahead of this front, many of which increased to severe magnitude and produce mainly large hail with some wind damage reports.
5/23/2010	Half dollar size hail fell on Pine Hill Drive. Damage values are estimated. Scattered thunderstorms developed during the early afternoon hours across portions of Virginia. A couple of these managed to produce some hail ranging from penny to half dollar size.
5/28/2010	Golfball size hail was reported along Little Piney Road. Damage values are estimated. A backdoor cold front pushed south into the region and stalled along the crest of the Blue Ridge along a north to south orientation. During the afternoon and early evening, numerous thunderstorms developed along and near the front. Some of these produced damaging wind and hail along with flash flooding.
6/12/2010	Trees were blown down in Madison Heights. A large road sign was also blown over on Route 29. Damage amounts are estimated.
7/20/2010	Thunderstorm winds knocked down a tree on Zane Snead Drive near Boxwood Farm Road.
8/4/2010	A tree was blown down onto a house at the intersection of Elon Road and Horeshoe Bend Rd. A complex of thunderstorms, some severe, crossed the region during the evening hours producing pockets of winds damage over a wide area. Numerous trees were blown down by thunderstorm winds on Route 130 and Route 29.

Amherst County Wind Occurrences (Hurricane/Tornado) since 2006

Date	Description
8/5/2010	Numerous trees were blown down. A cold front crossed into the area at peak heating of the day creating high instability along with moderate wind shear. Scattered thunderstorms developed ahead of the front as well as more organized lines closer to the front, producing downburst winds but very little hail.
8/5/2010	Two trees were blown down on Lovelady Creek Road. A cold front crossed into the area at peak heating of the day creating high instability along with moderate wind shear. Scattered thunderstorms developed ahead of the front as well as more organized lines closer to the front, producing downburst winds but very little hail.
8/26/2010	A one-foot diameter tree limb was blow down. A combination of daytime heating, instability and low-level moisture ahead of a cold front resulted in scattered showers and thunderstorms. Some of the stronger cells produced golf-ball size hail and winds up to 60 mph causing tree damage.
9/22/2010	Quarter size hail fell on Turtle Hollow Road. A very unstable atmosphere with plenty of potential for strong downdrafts of wind existed across the the region.
9/30/2010	Small stream flooding occurred along Higginbottom Creek, and Higginbottom Road was flooded and closed because of the water. Damage values are estimated.
12/1/2010	Thunderstorm winds blew a tree down on Higginbotham Creek Road. Damage values are estimated. Trees were downed in association with thunderstorms along a cold front as it passed through the region.
2/25/2011	Around 20 trees and power lines were blown down by high winds across Amherst county.
4/26/2011	Southerly winds out ahead of a deep trough over the southern plains ushered in warm and humid air into the region. The resulting instability, combined with moderate winds aloft, combined to produce an environment marginally favorable for severe weather. Thunderstorms formed mainly along and east of the Blur Ridge during the afternoon, and several of these storms became severe with large hail and damaging winds.
5/23/2011	Isolated storms drifted across the area and became briefly severe over Amherst County.
6/12/2011	Thunderstorm winds blew trees down for a one mile stretch along Route 151 between Piney River and Clifford. Damage values are estimated.
6/28/2011	Thunderstorm winds blew a tree down. Damage values are estimated. A cold front swept through the region on the 28th. Multiple clusters of storms accompanied the front as it progressed. Some of these storms increased to severe levels and produced large hail and damaging winds.
7/4/2011	Numerous trees blown down across Amherst county.
8/14/2011	A large oak tree reported blown down by thunderstorm winds
8/25/2011	Trees were reported down from thunderstorm winds along Route 60.
8/25/2011	Trees were blown down by thunderstorm winds on River Road near Madison Heights.
8/27/2011	Around five trees were blown down across the county.

Amherst County Wind Occurrences (Hurricane/Tornado) since 2006

Date	Description
9/1/2011	Several trees were blown down near the intersection of Highway 29 and 151. Damage values are estimated.
11/23/2011	Trees were reported blown down in several locations across Amherst county.

Appomattox County Wind Occurrences (Hurricane/Tornado) since 2006

Date	Description
6/23/2006	Large trees were downed between Evergreen and along Route 696 in Pamplin in Appomattox.
7/19/2007	Thunderstorm winds blew a tree down on Route 727. Damage values are estimated. In advance of an approaching cold front, thunderstorms developed during the afternoon hours of the 19th. Some of these increased to severe levels producing damaging winds with numerous reports of trees being blown down and hail ranging from nickel to quarter size.
8/21/2007	Many trees were blown down. A frontal boundary to the northeast, kept an unstable environment over the area during the afternoon of August 21st. An upper disturbance passed overhead which helped to trigger numerous thunderstorms. Some of these storms were severe with damaging winds and large hail.
3/4/2008	Two trees were downed by thunderstorm wind gusts along Oakville Road near Gladstone. A strong cold front moving through the area brought severe thunderstorms with damaging winds.
7/7/2008	A tree was blown down. Damage values are estimated. An uncharacteristic area of relatively cool low pressure moved southeast out of Canada into the region. Daytime heating due to sunshine combined with the relatively cooler low overhead and helped to result in a very unstable atmosphere. The result was the formation of thunderstorms with numerous reports of severe hail and damaging winds.
7/8/2008	A tree was blown down. Damage values are estimated. An uncharacteristic area of relatively cool low pressure moved southeast out of Canada into the region. Daytime heating due to sunshine combined with the relatively cooler low overhead and helped to result in a very unstable atmosphere. The result was the formation of thunderstorms with numerous reports of severe hail and damaging winds.
11/15/2008	A tree was blown down onto a power line along Gala Lake Road. A cold front swept across Virginia November 15th. Strong southerly winds ahead of the front helped bow out a line of thunderstorms, which brought damaging winds to the ground over portions of the Virginia piedmont late on the morning of the 15th.
5/12/2010	Power lines were blown down on Autumn Lane near Lucy Street and Chilton TD near Promise Lane Road. Damage values are estimated. A broad region of thunderstorms progressed through the region. Some of these storms reached severe criteria and producing damaging winds.
7/13/2010	Thunderstorm winds caused the roof of building to partially collapse on cars in a car lot. A strong upper level trough of low pressure moved across the Mid-Atlantic region during the afternoon and evening. Large scale lift in advance of this feature tapped into deep moisture to produce scattered severe thunderstorms in portions of western Virginia.
8/4/2010	Two trees were reported down on Old Evergreen Road. A complex of thunderstorms, some severe, crossed the region during the evening hours producing pockets of winds damage over a wide area.

Appomattox County Wind Occurrences (Hurricane/Tornado) since 2006

Date	Description
8/5/2010	Several trees were brought down along Route 24 and Route 460. A cold front crossed into the area at peak heating of the day creating high instability along with moderate wind shear. Scattered thunderstorms developed ahead of the front as well as more organized lines closer to the front, producing downburst winds but very little hail. Some training of cells occurred resulting in some flash flooding as well. Every Virginia county in the warning area had a warning issued at one point or another.
11/16/2010	Thunderstorm winds blew down a tree and power line on Piney Mountain Road. A line of low-topped thunderstorms developed ahead of a strong cold front associated with a surface low that moved through the Ohio Valley to the west of the Allegheny mountains. Several locations east of a Martinsville to Lynchburg line reported damage.
6/28/2011	Thunderstorm winds blew trees down at Hollywood. Damage values are estimated. A cold front swept through the region on the 28th. Multiple clusters of storms accompanied the front as it progressed. Some of these storms increased to severe levels and produced large hail and damaging winds.
7/24/2011	Thunderstorm winds blew down numerous trees across the area. Trees were down on Red House Road, Promise Land Road, Country Club Road and Purdum Mill Road. Another weak upper level storm system under a ride of high pressure aloft, moved out of West Virginia into our area during the afternoon. This combined with a trough of low pressure in the Piedmont helped trigger afternoon showers and thunderstorms. Enough instability was present for a few of these to become severe.
7/30/2011	Thunderstorm winds knocked several trees down. A cold front and an outflow boundary from earlier thunderstorms upstream both moved across the area during the afternoon. These boundaries helped spark numerous showers and thunderstorms. Enough instability developed during the afternoon to allow some of these storms to become severe.
7/30/2011	Several trees down across the southern half of the county. One was down on Route 644, one on Route 679, one on Route 643, one on Route 719, one on Route 604, and another on Lee Grant Avenue. A cold front and an outflow boundary from earlier thunderstorms upstream both moved across the area during the afternoon. These boundaries helped spark numerous showers and thunderstorms. Enough instability developed during the afternoon to allow some of these storms to become severe.

Bedford County Wind Occurrences (Hurricane/Tornado) since 2006

Date	Description
5/9/2004	Severe thunderstorms were scattered across far southwest Virginia during the afternoon and early evening of May 9th. Hail sizes ranged up to golf ball size, and there was an isolated report of a downed tree.
5/21/2004	Severe thunderstorms on the afternoon and evening of May 21st from the Roanoke Valley south to Southside Virginia produced hail up to the size of golf balls and destructive winds that toppled trees and power and telephone lines.
5/22/2004	During the afternoon of May 22nd, severe thunderstorms over the Roanoke Valley produced large hail ranging up to tea cup size with an isolated report of severe winds blowing a tree down on top of power lines.
5/23/2004	In the late morning and early afternoon of May 23rd, severe thunderstorms impacted areas of southwest Virginia mainly just east of the Blue Ridge Mountains. Hail sizes ranged up to golf ball size, and some wind gusts were strong enough to down some trees.
7/10/2004	During the afternoon of the 10th, severe thunderstorms produced wind damage and large hail across portions of Western Virginia. A severe thunderstorm in Franklin County, downed several trees in the Glade Hill community, with trees falling on and damaging vehicles and several homes. Thunderstorm winds downed trees across Botetourt County, including some that fell on a vehicle along Interstate 81 in Troutville. Trees were also downed in Stuart, as well as other parts of Patrick County. Winds downed trees in Moneta, Chatham and Woodlawn as well. In Woodlawn, trees fell on a vehicle on Highway 221.
9/17/2004	At 1212 EST, an F0 tornado touched down near Dickerson Road, and the width was less than 50 yards. The tornado damage path widened and varied from 100 yards to as much as 300 yards, as it did moderate to strong F1 damage to trees. A few homes suffered only minor damage to shingles and roofs, mainly due to trees falling on them. As the F1 tornado crossed Highway 24 at 1215 EST, it continued to damage trees, and was about 75 yards wide. A poorly constructed building was demolished. As the tornado moved north, it continued to down trees. Also, a car was pivoted in a driveway but undamaged. Minor structural and roof damage to homes occurred, as the tornado increased to a weak F2. The tornado weakened to F0 by 1217 EST, downing more trees along County Road 619.
9/17/2004	In Campbell County, trees were downed on 2 vehicles. In Appomattox County, many trees were downed. In Bedford County, many large trees were downed, near Peaks of Otter. Many trees were downed in Galax.
3/23/2005	A thunderstorm during the afternoon of the 23rd produced hail up to quarter sized and damaging winds in Montgomery county. Thunderstorms on the afternoon of the 23rd produced penny sized hail across portions of Roanoke and Bedford counties in southwest Virginia.

Bedford County Wind Occurrences (Hurricane/Tornado) since 2006

Date	Description
4/16/2005	Cold arctic high pressure over the region allowed for clear skies and light winds, the perfect combination for cold temperatures. Sub-freezing were reported across parts of the Roanoke Valley and Southside Virginia. Specific morning low temperature for Campbell Co. and the City of Lynchburg include 26 at Brookneal, 28 in the City of Lynchburg and 31 at the Lynchburg Airport; for Bedford Co. include 31 at Holcomb Rock; for Pittsylvania Co. include 28 at Chetham; for Roanoke Co and City include 31 at the airport and 32 in the city; for Henry Co include 30 at the Martinsville Airport; for Patrick Co. include 29 in the eastern part of the County.
6/6/2005	Severe thunderstorms during the evening of the 6th produced hail up to nickel sized near Rocky Mount in Franklin county. Thunderstorm winds during the evening of the 6th downed trees near Huddleston in Bedford.
8/16/2005	Six trees downed in a yard. A weak frontal boundary stalled just north of the area, with impulse working southeast into a highly unstable atmosphere, brought scattered severe thunderstorms to Western Virginia during the afternoon and evening of the 16th.
12/15/2005	A winter storm moved across southwest Virginia on the afternoon and night of the 15th of December. A band of sleet, snow and freezing rain moved through the region. As the storm progressed east, it coated the area with a 1/4 to 3/4 inch of ice. Appalachian Power reported that falling trees, tree limbs and power lines interrupt electric service to 38,000 customers especially in Campbell, Patrick, Henry and Carroll counties. Close to 10,000 customers lost power in the Lynchburg area. The Virginia State Police reported numerous accidents.
1/14/2006	A cold front passed across Virginia in the early morning hours of the 14th. After sunrise, winds increased and very strong gusts during the day resulted in numerous reports of trees down, many power lines down, power outages, signs blown down or bent, and some structural damage from trees falling on buildings, and shingles being blown off roofs.
4/3/2006	Numerous severe thunderstorms developed in the unstable air the afternoon of the 3rd in advance of an approaching cold front. Severe wind gusts downed trees and some powerlines in many locations.
4/7/2006	A line of severe thunderstorms progressed across the area the evening of the 7th in association with a cold front. Numerous reports of both damaging winds around 60 to 75 mph downing trees and/or power lines and large hail were common with these storms as they moved through the region.
5/14/2006	Numerous thunderstorms developed late in the morning on the 14th, lasting into the afternoon. Severe storms brought mainly large hail, up to half dollar size, to southwest Virginia. Isolated wind damage also occurred, resulting in a few trees down.
6/23/2006	Thunderstorm winds downed several large trees along the Blue Ridge Parkway near Peaks of Otter. The Public Safety Director of Amherst reported 20-30 trees downed by thunderstorm winds in Amherst county. There was an isolated strip about 3/4 mile long of 2 foot diameter trees downed.

Bedford County Wind Occurrences (Hurricane/Tornado) since 2006

Date	Description
6/28/2006	Thunderstorm winds downed several trees 1 mile southeast of Goode in Bedford county. A severe thunderstorm produced penny sized hail 2 miles east of Blacksburg. Thunderstorm winds downed numerous trees along the Blue Ridge Parkway near the Virginia 130 Intersection. A stop sign was also uprooted from the ground.
7/4/2006	Thunderstorms fired in advance of an approaching cold front. Some of these reached severe criteria and produced damaging wind gusts between roughly 60 and 80 mph. The most common form of damage was downed trees and powerlines. There was one area that reported structural damage. Near Smith Mountain Lake northeast of Burnt Chimney there was structural damage to decks, roofs, a chimney and two cars. There was also a couple of reports of hail the size of pennies to nickels with the thunderstorms. One storm also helped to produce flash flooding in the town of Cana in Carroll County when high rushing waters blocked the portion of Airport Church Road at U.S. 52 and Wards Gap.
7/4/2006	Thunderstorms fired in advance of an approaching cold front. Some of these reached severe criteria and produced damaging wind gusts between roughly 60 and 80 mph. The most common form of damage was downed trees and powerlines. There was one area that reported structural damage. Near Smith Mountain Lake northeast of Burnt Chimney there was structural damage to decks, roofs, a chimney and two cars.
7/13/2006	In advance of a cold front thunderstorms developed. Some of these storms reached severe limits by produced damaging winds in the 60 to 70 mph range. Trees were downed in numerous locations. Lightning stuck struck two apartment buildings. One of the structures had a portion of an exterior wall blown into its interior room causing damage, and a little charring.
7/13/2006	In advance of a cold front thunderstorms developed. Some of these storms reached severe limits by produced damaging winds in the 60 to 70 mph range. Trees were downed in numerous locations. Lightning stuck struck two apartment buildings. One of the structures had a portion of an exterior wall blown into its interior room causing damage, and a little charring.
7/19/2006	Thunderstorms began developing during the afternoon hours of the 19th due primarily to daytime heating in an already unstable atmosphere. Some of these increased to severe levels, producing both damaging wind gusts, and large hail.
7/21/2006	Daytime heating helped to produce scattered thunderstorms across the region. Some of these strengthened to severe levels and produced wind gusts of 60 to 70 mph that helped to down trees and tree limbs. One tree fell on two cars and a fence in the City of Bedford. Also, severe hail fell continuously in the City of Bedford for 21 minutes. During this time, the hail ranged from penny size to quarter size. Very heavy rains also accompanied the City of Bedford storm.
5/12/2007	A large tree fell pulling power lines down. EPISODE NARRATIVE: Severe thunderstorms developed along the foothills in Virginia during the afternoon and evening of May 12th. The storms brought hail up to the size of golf balls and wind damage.

Bedford County Wind Occurrences (Hurricane/Tornado) since 2006

Date	Description
5/28/2007	Severe thunderstorms brought wind damage and large hail to portions of southwest Virginia during the afternoon of May 28th.
5/28/2007	Trees were downed on Dickerson Mill Road. EPISODE NARRATIVE: Severe thunderstorms brought wind damage and large hail to portions of southwest Virginia during the afternoon of May 28th.
5/28/2007	A tree was blown down on Walnut Hollow Road. EPISODE NARRATIVE: Severe thunderstorms brought wind damage and large hail to portions of southwest Virginia during the afternoon of May 28th.
5/31/2007	Several trees downed. EPISODE NARRATIVE: Severe thunderstorms developed during the afternoon of May 31st, and continued into the evening. These storms formed along a dying backdoor cold front, with a moist, unstable air mass in place. The storms produced large hail and damaging winds to portions of southwest Virginia.
6/11/2007	Severe thunderstorms produced wind damage and hail up to quarter sized.
6/19/2007	A couple of trees down. EPISODE NARRATIVE: Severe thunderstorms produced wind damage and hail up to the size of quarters.
6/19/2007	Trees down. EPISODE NARRATIVE: Severe thunderstorms produced wind damage and hail up to the size of quarters.
6/25/2007	Severe thunderstorms created wind damage and hail up to penny sized.
7/16/2007	Thunderstorms formed during the afternoon of the 16th. Some of these storms reached severe levels producing damaging winds gusts and penny to quarter size hail.
7/17/2007	Thunderstorms formed during the afternoon of the 17th. Some of these storms were severe, producing damaging wind gusts and hail ranging from penny to quarter size.
7/19/2007	Thunderstorm winds blew large tree limbs down on a golf course. Damage values are estimated. EPISODE NARRATIVE: In advance of an approaching cold front, thunderstorms developed during the afternoon hours of the 19th. Some of these increased to severe levels producing damaging winds with numerous reports of trees being blown down and hail ranging from nickel to quarter size.
7/19/2007	In advance of an approaching cold front, thunderstorms developed during the afternoon hours of the 19th. Some of these increased to severe levels producing damaging winds with numerous reports of trees being blown down and hail ranging from nickel to quarter size.
7/19/2007	Thunderstorm winds blew down numerous trees. Damage values are estimated. EPISODE NARRATIVE: In advance of an approaching cold front, thunderstorms developed during the afternoon hours of the 19th. Some of these increased to severe levels producing damaging winds with numerous reports of trees being blown down and hail ranging from nickel to quarter size.
7/19/2007	Thunderstorm winds blew down a tree. Damage values are estimated. EPISODE NARRATIVE: In advance of an approaching cold front, thunderstorms developed during the afternoon hours of the 19th. Some of these increased to severe levels producing damaging winds with numerous reports of trees being blown down and hail ranging from nickel to quarter size.

Bedford County Wind Occurrences (Hurricane/Tornado) since 2006

Date	Description
7/29/2007	A heavy rain producing thunderstorm prompted a small creek along Brookstone Road to significantly leave its banks. Subsequently, a home ended up having water surrounding it at one point. EPISODE NARRATIVE: Slow moving, heavy rain producing thunderstorms caused flash flooding to take place over parts of the area. One of these storms also reached severe limits and uprooted some trees.
8/16/2007	Hail up to the size of quarters fell 5 mile east of the city of Bedford. EPISODE NARRATIVE: Scattered severe thunderstorms developed ahead of a cold front during the afternoon of August 16th. These storms brought damaging winds and large hail from the southern Shenandoah Valley east into the Virginia piedmont.
8/21/2007	Trees were blown down. EPISODE NARRATIVE: A frontal boundary to the northeast, kept an unstable environment over the area during the afternoon of August 21st. An upper disturbance passed overhead which helped to trigger numerous thunderstorms. Some of these storms were severe with damaging winds and large hail.
9/1/2007	Hay, grain, soy and tobacco production was down forty to fifty percent due to the drought. The southwest portion of Campbell county had the greatest losses. EPISODE NARRATIVE: Drought conditions worsened across southwest Virginia, as seventeen counties fell into a severe drought (D2) on September 1st. This severe drought continued through the end of September. Crop damage estimates are from county extension offices.
2/6/2008	A strong cold front moving into the area triggered a few thunderstorms, some of which became severe. These isolated severe thunderstorms brought wind damage to portions of southwest Virginia.
2/6/2008	A couple of large limbs were downed by severe thunderstorm winds. EPISODE NARRATIVE: A strong cold front moving into the area triggered a few thunderstorms, some of which became severe. These isolated severe thunderstorms brought wind damage to portions of southwest Virginia.
2/10/2008	Several trees were downed across the county. EPISODE NARRATIVE: A fast moving arctic front swept across the area February 10th. In its wake, very strong west winds and wind gusts ensued over the area. Each county in southwest Virginia received wind damage. These high winds also touched off several wildfires. Three of the largest wildfires were Little Cuba (2700 acres) in Craig County, Black Horse (1500 acres) in Bedford County, and Green Ridge Mountain (about 4000 acres) in Roanoke County. Despite the size of these fires, no personal property was damaged or destroyed.
4/26/2008	Thunderstorm winds blew down trees across Highway 460. Power lines were also blown down by the winds. Damage values are estimates. EPISODE NARRATIVE: A cold front moved through the area bringing with it showers and thunderstorms. Some of the storms produced large hail and damaging winds.
6/7/2008	Thunderstorm winds knocked down one tree on State Route 737. Damage values are estimated. EPISODE NARRATIVE: Outflow boundaries from earlier showers and thunderstorms interacted with a warm, moist and unstable air mass to trigger severe thunderstorms. These storms produced damaging winds and large hail on June 7.

Bedford County Wind Occurrences (Hurricane/Tornado) since 2006

Date	Description
6/22/2008	An upper level area of low pressure moved across the region ahead of a weak upstream cold front. These features combined with an unstable air mass to produce widespread strong to severe thunderstorms that produced not only large hail but also included some wind damage on June 22. These severe storms lingered well after the loss of heating.
6/28/2008	A tree was blown down on Route 655 west of the Smith Mountain Lake Airport. Damage values are estimated. EPISODE NARRATIVE: A cold front moving into moist, unstable air across southwest Virginia triggered scattered thunderstorms on June 28. A few of these storms produced damaging wind gusts and large hail over the foothills of Virginia.
7/8/2008	A tree was blown down. Damage values are estimated. EPISODE NARRATIVE: Winds associated with a strong upper level jet wrapping into the area behind an exiting upper level disturbance were brought downward to the surface by associated severe thunderstorms.
7/9/2008	Trees of two to three feet in diameter were blown down and blocked Route 24. Damage values are estimated.
7/22/2008	A large outflow boundary from an overnight thunderstorm complex moved through the region during the morning and early afternoon hours of July 22. This prevented thunderstorm development until early evening when storms started developing.
4/20/2009	A cold front passed through the area and generated some thunderstorms. Some of these storms reached severe levels and produced penny to nickel size hail.
6/3/2009	A moderately unstable air mass and seasonably strong mid-level shear helped to produce widespread multicellular storms beginning in the early afternoon of June 3rd. The storms began primarily as hail-makers but later in the day transitioned to damaging winds across a fairly wide area.
6/11/2009	Thunderstorm winds brought down one tree in Bedford. EPISODE NARRATIVE: A large complex of thunderstorms pushed from Tennessee and Kentucky into the western forecast area by late afternoon of June 11th.
8/5/2009	Large tree limbs were blown down. EPISODE NARRATIVE: A moist and unstable air mass ahead of cold front, along with an strong upper disturbance, contributed to the development of organized thunderstorms August 5th. Severe thunderstorms were scattered across portions of southwest Virginia, and brought mainly wind damage, with a few areas receiving up to nickel sized hail.
8/19/2009	A tree was blown down on Goodview Road. EPISODE NARRATIVE: A thunderstorm produced damaging winds in Bedford County during the afternoon of August 20th.
2/10/2010	Strong northwest winds behind a strengthening coastal low caused power outages due to a tree down on power lines on Highway 24 east of Vinton. A measured wind gust of 63 mph was also recorded in Stewartsville, and a tree was blown down on a car on Route 24 in Chamblissburg.
2/26/2010	A wind gust to 71 MPH was recorded in Stewartsville. Several trees were also reported down in the same area.

Bedford County Wind Occurrences (Hurricane/Tornado) since 2006

Date	Description
3/22/2010	A single wide mobile home was blown 6 inches off its foundation by thunderstorm winds. One large oak tree was also blown down.
4/5/2010	Storms fired up initially in the afternoon of the 5th over the western mountains south of a front stalled out over the Ohio Valley. The primary severe mode was large hail over the mountains with some scattered wind damage in the piedmont.
5/28/2010	A tree was blown down on Hurricane Drive. Damage values are estimated.
6/19/2010	Trees were blown down blocking traffic at 6500 Jeters Chapel Road. Damage amounts are estimated.
6/28/2010	Trees were blown down on Smith Mountain Lake Parkway near Huddleston. Damage amounts are estimated.
7/8/2010	Several trees were knocked down by thunderstorm winds on Centerville Road. EPISODE NARRATIVE: Low pressure was located off the Carolina coast and spread moisture westward into the area which aided in the development of severe isolated to scattered thunderstorms mainly across the Virginia Southside.
7/9/2010	Johns Creek was reported to have water briefly out of its banks and caused roads to be closed. EPISODE NARRATIVE: Low pressure was located off the Carolina coast and spread moisture westward into the area which aided in the development of isolated to scattered thunderstorms. Heavy rains caused flash flooding in Bedford County.
7/13/2010	Numerous large tree limbs were blown down by thunderstorm winds on Bentwood Drive. EPISODE NARRATIVE: A strong upper level trough of low pressure moved across the Mid-Atlantic region during the afternoon and evening. Large scale lift in advance of this feature tapped into deep moisture to produce scattered severe thunderstorms in portions of western Virginia.
7/20/2010	Several trees were blown down in the Eagle Eyrie area near Route 501. EPISODE NARRATIVE: Warm and moist air ahead of a cold front in the Ohio Valley combined with an upper level low pressure system to spark scattered severe thunderstorms across southwest Virginia.
7/29/2010	One tree was blown down along Route 668 near New London Road.
8/4/2010	One tree was blown down. EPISODE NARRATIVE: A complex of thunderstorms, some severe, crossed the region during the evening hours producing pockets of winds damage over a wide area.
8/5/2010	Evington Road was closed due to flood waters flowing over the road.
9/22/2010	A thunderstorm wind gust was estimated at 60 mph.
7/12/2011	Thunderstorm winds blew multiple trees down along Forest Road just outside of the City of Bedford limits. Damage values are estimated.

Campbell County Wind Occurrences (Hurricane/Tornado) since 2006

Date	Description
7/19/2006	Thunderstorms began developing during the afternoon hours of the 19th due primarily to daytime heating in an already unstable atmosphere. Some of these increased to severe levels, producing both damaging wind gusts, and large hail. As evening arrived, severe storms continued to be a treat thanks to the approach and then arrival of a dying meso-scale convective complex that moved out of the Ohio Valley and into our region.
4/6/2006	Cold arctic high pressure over the region allowed for sub-freezing temperatures after a period of relatively mild weather in late March and very early April 2007. The mild weather helped to jump start the growing season across the area, and freezing temperatures, as low as the lower to middle 20s F, lead to significant crop damage.
4/16/2007	Trees were blown down in Campbell County and across the City of Lynchburg. Some of these fallen trees brought down powerlines in the process. At one point, 4600 electrical customers in the Lynchburg area were without power.
5/21/2007	Thunderstorm winds blew the roof off a 60 by 100 foot barn. A severe thunderstorm produced wind damage to a barn in Campbell County during the evening of May 21st.
6/11/2007	Severe thunderstorms produced wind damage and hail up to quarter sized.
6/25/2007	Tree down on Browns Mill Road. Severe thunderstorms created wind damage and hail up to penny sized.
6/28/2007	Power lines down. Severe thunderstorms during the afternoon contained damaging winds and hail up to nickel sized.
7/19/2007	Thunderstorm winds blew a tree down on Sunnymeade Road. Damage values are estimated. In advance of an approaching cold front, thunderstorms developed during the afternoon hours of the 19th. Some of these increased to severe levels producing damaging winds with numerous reports of trees being blown down and hail ranging from nickel to quarter size.
8/9/2007	Severe thunderstorm winds blew a roof off a barn, displaced sheds, and downed five to six trees. It also damaged a crop of hay.
8/16/2007	Trees and power lines were blown down. Scattered severe thunderstorms developed ahead of a cold front during the afternoon of August 16th. These storms brought damaging winds and large hail from the southern Shenandoah Valley east into the Virginia piedmont.
8/21/2007	Two large road signs were snapped off. Damage amounts are rough estimates. A frontal boundary to the northeast, kept an unstable environment over the area during the afternoon of August 21st. An upper disturbance passed overhead which helped to trigger numerous thunderstorms. Some of of these storms were severe with damaging winds and large hail.
8/26/2007	Numerous large tree limbs were blown down on a golf course. A rain shelter also sustained wind damage. A weak cold front moved through western Virginia August 26th. A couple of thunderstorms that developed became severe over the piedmont, producing wind damage.

Campbell County Wind Occurrences (Hurricane/Tornado) since 2006

Date	Description
12/16/2007	Trees down along Three Creeks Road near Gladys. As low pressure moved northeast along the East Coast, strong northwest winds in its wake resulted in downed trees and power lines.
2/10/2008	Trees were blown down across the county and in the city of Lynchburg. One tree fell onto a car in Altavista. A fast moving arctic front swept across the area February 10th. In its wake, very strong west winds and wind gusts ensued over the area. Each county in southwest Virginia received wind damage. These high winds also touched off several wildfires. Three of the largest wildfires were Little Cuba (2700 acres) in Craig County, Black Horse (1500 acres) in Bedford County, and Green Ridge Mountain (about 4000 acres) in Roanoke County. Despite the size of these fires, no personal property was damaged or destroyed.
6/3/2008	Lightning struck a shed and caught it fire. Damage amounts are estimated. Low level boundaries, an unstable airmass, and an upper level disturbance provided the trigger for isolated severe thunderstorms during the afternoon and evening of June 3, across southwest Virginia. One severe thunderstorm produced a brief EF0 tornado in the city of Roanoke. Other severe storms produced hail up to the size of golf balls.
9/6/2008	A large culvert pipe was washed out along Route 637 (Whitehall Road) making the road impassable. Tropical Storm Hanna made landfall along the North Carolina/South Carolina border during the early morning of September 6th as a strong tropical storm.
7/11/2009	Thunderstorm winds blew down a tree and a power line along Main Street. Damage values are estimated. Scattered thunderstorms developed over parts of southwest Virginia the afternoon of July 11. One of these storms reached severe levels and produced damaging thunderstorms winds.
7/17/2009	A brief tornado touchdown occurred just north of Epsons Road, two miles west of Brookneal. The tornado downed and snapped numerous trees. Damage values are estimated. In the advance of a strong cold front, numerous showers and thunderstorms developed. Many of these grew to severe levels and produced damaging winds and hail. Enough rotation existed for the development of three tornadoes, two occurring in Pittsylvania County and one in southern Campbell County.
7/17/2009	A microburst occurred near the intersection of Epsons Road and Mclver Road west of Brookneal. Damaging winds downed many trees. Some of the fallen trees damaged two houses and destroyed three sheds. Damage values are estimated. In the advance of a strong cold front, numerous showers and thunderstorms developed. Many of these grew to severe levels and produced damaging winds and hail. Enough rotation existed for the development of three tornadoes, two occurring in Pittsylvania County and one in southern Campbell County.
7/26/2009	Thunderstorm winds blew a tree down on Pigeon Run Road and several trees down on Three Creeks Road. Damage values are estimated. A cold front slowly made its way across the region. Numerous showers and thunderstorms were associated with it. Some of these storms reached severe levels once the front was east of the crest of the Blue Ridge.

Campbell County Wind Occurrences (Hurricane/Tornado) since 2006

Date	Description
2/10/2010	Strong northwest winds behind a strengthening coastal low caused scattered tree damage across the county through the day of the 10th. A transformer power line was also down near Altavista.
4/6/2010	Structure fires from lightning strikes were reported in the Concord area. Storms fired up initially in the afternoon of the 5th over the western mountains south of a front stalled out over the Ohio Valley. The primary severe mode was large hail over the mountains with some scattered wind damage in the piedmont.
9/22/2010	Thunderstorm winds blew a tree down on a vehicle. One person in the vehicle was injured. Damage values are estimated.
4/16/2011	Numerous trees down and shingles blown off of houses near Brookneal. A strong closed upper level low pressure moved across the Ohio valley, producing a variety of extreme weather across southwest Virginia. In advance of this system, strong southeast winds produced wind damage across the higher elevations.
5/3/2011	Thunderstorm winds caused damage to numerous trees. Falling branches damaged a car and a fence in the Richland Hills area off Timberlake Road. A strong cold front crossed the region in the late afternoon and evening hours of the 3rd with storms erupting across the Virginia piedmont.
6/28/2011	Thunderstorm winds blew trees down. One of the falling trees brought down a power line. Damage values are estimated. A cold front swept through the region on the 28th. Multiple clusters of storms accompanied the front as it progressed. Some of these storms increased to severe levels and produced large hail and damaging winds.
7/30/2011	Several trees were blown down by thunderstorm winds across the southwest part of the county. One was on Route 626, another at the 100 block of Route 712 and another on Route 628. Power lines were also downed by some of these trees. A cold front and an outflow boundary from earlier thunderstorms upstream both moved across the area during the afternoon. These boundaries helped spark numerous showers and thunderstorms. Enough instability developed during the afternoon to allow some of these storms to become severe.
10/19/2011	Strong winds mixed down to the surface during a rain shower, knocking down a tree on a house along Thomas Jefferson Road in Forest, and also overturning bleachers and throwing bleachers through a fence at Jump Park. Damage amounts are estimated.

Historical Flood Occurrences In Region 2000



1905-2011

Primary Sources: National Oceanic and Atmospheric Administration, Historical Society (Newspapers)

Date	Damages
June 9, 1905	James River crested at 23 feet.
August 23, 1969	<p>Torrential rains resulting from the stalling of Hurricane Camille by a cold front caused record floods on the Piney, Pedlar and Buffalo Rivers; each with over three times the discharge compared to normal conditions. Some estimates claim that over 40 inches of rain fell on the mountains of the region in a five hour period. The James River peaked at 26 feet.</p> <p>Amherst County: More than 100 people died in Amherst and neighboring Nelson Counties.</p> <p>Lynchburg City: Five reported dead due to flooding. Five to six feet of water was noted in the business district. US 29 was blocked due to the floodwaters.</p>
October 10, 1972	<p>Flooding events caused large amounts of damages to primary and secondary roads throughout the region.</p> <p>Amherst County: Amherst with \$142,000 in road damages. There were about 200 locations damaged on secondary roads with eight locations on primary roads suffering substantial damage. Amherst 125,000 in secondary roads, 17,000 in primary roads.</p> <p>Appomattox County: Damage estimates for the county were greater than \$20,000 to secondary roads, \$5,000 to primary roads,</p> <p>Campbell County: Damages to primary roads estimated at \$8,000.</p>

Date	Damages
November 4 - 7, 1985	<p>The remnants of Hurricane Juan combined with successive weather fronts dropped up to 10 inches of rain on the region, causing severe flooding of the James River and its tributaries. Governor Robb appealed to President Reagan for federal aid for 11 localities after the floods caused over \$50 million in damage.</p> <p>Amherst County: Severe flood damage to homes along River Road. Damages were reported at \$5.7 million (\$2 million alone to Treasure Island).</p> <p>Appomattox County: Private property damage totaled \$411,000; Agricultural losses totaled \$33,000 and damage to public property was reported at \$63,000.</p> <p>Bedford County: Damage was estimated at \$4.5 million.</p> <p>Lynchburg: The James River crested at 35 feet: the highest level ever recorded here. City officials estimated damage to private homes, businesses and industries at \$30 million and damage to publicly owned facilities at \$6.3 million. Concord Turnpike and Jefferson and Hydro streets needed road work and debris removal. The Lynchburg foundry was under 24 inches of mud.</p>
November 9, 1985	<p>Flash flooding occurred in normally dry hollows. The James River crested at 35 feet, 17 feet above flood level. The City of Lynchburg suffered severe damages as well as surrounding counties. Damages for counties within the regional commission suffered damages estimated at \$12.5 million.</p> <p>Lynchburg City: A railroad car and several unidentified containers were found floating near the carter glass bridge. Eight people were injured by what was thought to be chlorine fumes. Businesses were overwhelmed with flooding from the James River (by Williams Viaduct). More than 20 buildings were covered to their rooftops and sustained substantial damages. Griffin Pipe Products sustained almost 3 million in damages. Liberty University's football practice facility was flooded with damages to equipment (estimates ranged between \$110,000 - 115,000). Flood damages to the city top \$52 million. Damages to private homes, businesses and industries around \$44.5 million. Damages to publicly owned facilities (sewer and streets) were around \$7.5 million. Flood damage in surrounding counties was estimated at \$12.5 million.</p>
May 19, 1992	The James river crested at 23 feet.

Date	Damages
June 5, 1993	<p>A devastating line of thunderstorms with hurricane-force winds, heavy rains and marble-sized hail tore through Central Virginia, flooding low-lying areas, downing thousands of trees and leaving 50,000 homes without power. Minor structural damage was widespread. No fatalities were reported.</p> <p>Amherst County: \$250,000 in damage was reported, \$60,500 of which was uninsured.</p> <p>Appomattox County: Over \$5 million in damage was reported, over half of which was uninsured.</p> <p>Bedford County: 175 residents of Elks National Home were evacuated when a fallen tree ruptured a propane tank and severe structural damage was reported at Poplar Forest.</p> <p>Campbell County: Over \$5 million in damage was reported, 60% of which was agricultural damage. Telephone and cable services were disrupted, several mobile homes blew over; some secondary roads were entirely impassible.</p> <p>Lynchburg: Over \$20.4 million in damage was reported. Lynchburg Municipal Airport reported sustained wind gusts in excess of 70 m.p.h. and was closed for 10 hours. More than 80 people sought emergency medical care at Lynchburg General Hospital. More than 100 power poles needed replacement resulting in 80% of APCO's service area losing power. Two hangars were severely damaged at Falwell Airport. The back wall of the Old Academy of Music Theater was ripped off, as well as the steeple from First Baptist Church, which blew onto and through the church's roof. More than 14,000 homes were without power 48 hours after the storm, and 300 people were without power 5 days after the storm.</p>
November 27, 1993	<p>Lynchburg City: A section of Forest Brook Road was closed for several hours as a bridge near the Cavalier Steel plant became covered by water due to heavy rains.</p>
August 17, 1994	<p>Bedford: Around 1.25 inches of rain fell as the remnants of Tropical Storm Beryl moved through. One lane of U.S. 460 near Virginia 313 was briefly closed due to high water.</p>
January 15, 1995	<p>The James River crested at 19 feet, one foot above flood stage.</p> <p>Lynchburg City: At Holcomb Rock, between Lynchburg and Big Island the river is expected to crest at 27-28 feet with a flood stage of 22 feet. Nine cows seeking refuge from a flooded pasture in a low section along 460 were struck, causing five accidents.</p>

Date	Damages
June 22, 1995	<p>Over two days of torrential downpours dropped over ten inches of rain in some areas of Central Virginia.</p> <p>Town of Altavista: Lynch Creek overflowed its banks and sent water gushing into three town landmarks – the Lane Col, Shreve Park and the YMCA and deposited one to two feet of mud on town streets.</p> <p>Amherst County: At times, rain fell at the rate of about 2.5 inches per hour. Over 100 Appalachian Power customers were without electricity.</p> <p>Bedford County: U.S. 221 was washed out in several places. The road was also blocked due to a mudslide near Little Otter bridge and was underwater near Aylor’s store. Virginia Routes 811, 660 and 621 were also closed due to flooding.</p> <p>Campbell County: Over eight inches of rain fell in less than two days. Timber Lake dam failed, releasing a torrent of water down Buffalo Creek. The 75-acre lake dropped four feet in 30 minutes. A rescue worker was killed as he attempted to reach one of three stranded cars on the U.S. 460 bridge as water rose to almost 5 feet above the road surface on the bridge. The Staunton River north of Altavista crested at nine feet above flood stage. The U.S. 29 bridge over Otter Creek was closed due to floating debris. Virginia Route 683 was closed for three days. Three homes were severely damaged near Buffalo Creek and the Buffalo Creek Nature Area was closed. A local woman was killed as her car was swept away by over eight feet of water on Turkey Foot Road.</p> <p>Lynchburg County: At times, the rain fell at the rate of about 2.5 inches per hour.</p>
June 28, 1995	<p>Heavy rains struck just six days after up to ten inches fell on the region.</p> <p>Amherst County: Heavy rains released a torrent of mud and water down mountainsides and onto U.S. 501, stranding three truck drivers for an entire day. Georgia Pacific’s Big Island paper mill was forced to suspend operations due to rising water. Parts of U.S. 60 and Virginia Routes 130, 778 and 685 were closed due to flooding.</p> <p>Bedford County: Parts of Virginia Routes 24, 122 and 221 were closed due to flooding.</p> <p>Lynchburg City: Around \$2 million dollars damage was reported as the James River overflowed its banks.</p>

Date	Damages
July 1-6, 1995	<p>Damaged roads and high water from the worst flooding in decades in Virginia's Piedmont and Shenandoah Valley. Six people had been killed and 2 missing in floodwaters stretching from North to South along the Blue Ridge Mountains. Dozens of homes were destroyed and others will have to be razed because they are no longer safe. Flood damages were substantial for local farmers.</p> <p>Amherst County: Due to flooding, one road in the County was closed.</p> <p>Bedford County: 400 acres of milling wheat worth 4.25 a bushel was degraded to a lower grade that sells as 3 a bushel.</p> <p>Bedford City: A four foot wide sinkhole formed along South Street, police closed two blocks until damages could be repaired.</p> <p>Campbell County: Due to flooding, three roads in the County had to be blocked off. Much of the County's crop damage occurred along the Otter River and nearby Buffalo, Flat and Troublesome Creeks. They suffered \$720,000 in damage to hay and corn crops.</p>
January 19, 1996	<p>Heavy rains, melting snow, and high winds Friday morning shut down schools, closed roads, and flooded low-lying areas. Problems continued when the James River crested downstream from Lynchburg through Amherst and Nelson Counties.</p> <p>Bedford County: Portions of US 460 near Montvale were closed from flooding. Small trees were felled with no injuries were reported. The James River crested upstream from Lynchburg near Big Island, flooding portions of Georgia-Pacific paper mill.</p> <p>Lynchburg City: City officials evacuated residential roads near the James River. Residents on Hydro Street and Ruesens Road were also evacuated. Houses along Timberlake Drive suffered minor flood damages.</p> <p>Town of Altavista: Lynch Creek flooded portions of Pittsylvania Avenue, Main Street, and 7th Street. The Altavista Life Saving building as well as Shreve Park and War Memorial Park suffered water damage. Schools were closed due to dangers of flash flooding.</p>

Date	Damages
September 6, 1996	<p>Hurricane Fran caused flash flooding that closed portions of most area highways and downed trees, leaving thousands without electricity.</p> <p>Amherst County: 20 roads were closed due to flooding.</p> <p>Town of Amherst: 300 residents were without power.</p> <p>Lynchburg City: 200 residents were without power. Hardest hit areas of flooding included Old Forest Road near Lynchburg College and the Greenwood and Sandusky apartments near the intersection of Greenwood and Oakdale Drives.</p> <p>Bedford County: 200 residents were without power.</p> <p>Campbell County: The historic Marysville Covered Bridge was destroyed. Trees were uprooted. 40 roads, including US 460 near Bedford County line and VA 24 west of US 29 were closed because of excess water.</p>
January 28, 1998	<p>Heavy rainfall in the region resulted in some moderate damage. Rainfall totals for region ranged from 1 to 3 inches.</p> <p>Appomattox County: Heavy rains resulted in Wreck Island Creek flooding Route 666 about 4 miles west-northwest of Oakville. The bridge and adjacent road was damaged by the flooding.</p>
August 8, 1998	<p>Thunderstorms on the 8th produced very heavy rain resulting in flash flooding. Thunderstorm rains flooded Route 29, five miles south of Lynchburg,</p> <p>Lynchburg City: About 2-3 inches falls in an hour in Lynchburg. Minor flooding and roads blocks for a few hours in Lynchburg area. Street included Fort Avenue, Sandusky Drive, McConville Rd., US 460. Flooding subsided in several hours.</p>
September 5, 1999	<p>Heavy rain from Tropical Storm Dennis downgraded to a tropical depression, brought over 3 inches of rain over two days at the Lynchburg airport. Some small creeks and streams flooded.</p> <p>Bedford County: Street flooding at the intersection of Route 24 and Route 122, eight and a half miles south of the City of Bedford and flooded Goose Creek onto adjacent roads, 10.5 miles south of the City of Bedford. High winds downed a tree onto State Route 863.</p> <p>Lynchburg City: The area received over three inches of rain in two days.</p>

Date	Damages
September 29, 1999	<p>Thunderstorms on the 29th produced damaging winds, flash flooding, and two tornadoes.</p> <p>Amherst County: Flooding caused the closing of Route 460 one mile north of Concord, stranding a motorist, numerous small streams and roads in Amherst County. Schools closed in Amherst County where over a dozen roads were closed due to flooding.</p> <p>Appomattox County: Flooded Mill Stream Bridge in Gretna, and several streams in western Appomattox County, closing several roads.</p> <p>Campbell County: Six creeks in western Campbell County flooded, closing several roads.</p> <p>Lynchburg City: Several roads were closed due to flooding. Thunderstorms spawned tornados in the area. One tornado was 50 yards wide and maximum winds were also estimated at about 80 miles an hour. In Lynchburg, 4.5 inches of rain over 48 hours. Problem areas were Hollins Mills Rd over Blackwater Creek, Greenwood Dr. at Greenwood Manor Apartments in Sandusky area, and 12th street between Harrison and Polk Street had a mudslide.</p>
April 16, 2000	<p>This storm resulted in four inches of rain in 2 hours.</p> <p>Bedford County: Four inches of rain fell in 2 hours. Communication center lost power; the water treatment plant had some flooding, damage several pump stations and electrical equipment.</p>
June 5, 2001	<p>Thunderstorms during the afternoon and evening of the 5th produced hail up to nickel size, flash flooding, and damaging winds.</p> <p>Bedford City: Thunderstorm winds downed trees in Bedford. A tent was also blown over in Bedford, resulting in minor injuries to a photographer.</p> <p>Campbell County: Several creeks flooded in northern Campbell County causing street closures in Timberlake.</p> <p>Lynchburg City: Heavy thunderstorm rains caused Dreaming Creek to flood Route 460 in Lynchburg.</p>
February 22, 2003	<p>Minor to moderate flooding occurred on the James River from the 22nd through the 24th. The river crested on the 22nd at 19.86 feet at Lick Run. Heavy rain brought flooding, combined with rain and wind could result in fallen trees and power outages.</p> <p>Amherst County: Flooding was noted near Beck Creek.</p> <p>Campbell County: Several roads in Altavista were closed, including 7th street and west, country club and pocket roads.</p> <p>Lynchburg City: Two streets were closed due to flooding (Greenwood Road). Several basements at Greenwood Apartments were flooded.</p>

Date	Damages
August 17-18, 1955	The category one hurricane named Diane caused heavy rains, compounding the flooding caused by Connie not even a week earlier. The lowest pressure seen across Virginia was 29.48" at Lynchburg. Several locations on the eastern slope of the Blue Ridge mountains recorded over a foot of rain. However, the heaviest flooding occurred along portions of the Shenandoah River Basin. High tides were also experienced, in addition to the rains. Damage in Virginia totaled \$10.7 million. This hurricane produced over \$686 million in damage, mainly due to its disastrous floods across the East Coast
August 23, 1969	Torrential rains resulting from the stalling of Hurricane Camille by a cold front caused record floods on the Piney, Pedlar and Buffalo Rivers; each with over three times the discharge compared to normal conditions. Some estimates claim that over 40 inches of rain fell on the mountains of the region in a five hour period. Amherst County: More than 100 people died in Amherst and neighboring Nelson Counties.
June 23, 1972	Hurricane Agnes. James river seen topping flood stage as rains continue. torrential rains in Lynchburg closed many of the city's though fares and industrial plants. At least on apartment complex was evacuated. Greenwood apartments on greenwood drive were evacuated as the creek flowing into College Lake overflowed. Many roads closed as a result of flooding. Caused minor backyard flooding along even the smallest rivers, agricultural and structural damage along major rivers.
November 4 - 7, 1985	The remnants of Hurricane Juan combined with successive weather fronts dropped up to 10 inches of rain on the region, causing severe flooding of the James River and its tributaries. Governor Robb appealed to President Reagan for federal aid for 11 localities after the floods caused over \$50 million in damage. Amherst County: Severe flood damage to homes along River Road. Damages were reported at \$5.7 million (\$2 million alone to Treasure Island). Appomattox County: Private property damage totaled \$411,000; Agricultural losses totaled \$33,000 and damage to public property was reported at \$63,000. Bedford County: Damage was estimated at \$4.5 million. Lynchburg City: The James River crested at 35 feet: the highest level ever recorded here. City officials estimated damage to private homes, businesses and industries at \$30 million and damage to publicly owned facilities at \$6.3 million. Concord Turnpike and Jefferson and Hydro streets needed road work and debris removal. The Lynchburg foundry was under 24 inches of mud.

Date	Damages
August 17, 1994	<p>Bedford: Around 1.25 inches of rain fell as the remnants of Tropical Storm Beryl moved through. One lane of U.S. 460 near Virginia 313 was briefly closed due to high water.</p> <p>Lynchburg City: Greater than 70 mph winds knocked down trees and power lines. Two million in damages.</p>
September 6, 1996	<p>Hurricane Fran caused flash flooding that closed portions of most area highways and downed trees, leaving thousands without electricity.</p> <p>Lynchburg City Twenty roads were closed due to flooding. Tens of thousands of American electric power company customers were without power. The storm closed businesses, schools and forced evacuations. The floodwaters formed a lake between Greenwood Dr and Sandusky Drive. Hardest hit areas of flooding included Old Forest Road near Lynchburg College and the Greenwood and Sandusky apartments near the intersection of Greenwood and Oakdale Drives.</p> <p>Town of Amherst: Three hundred residents were without power.</p> <p>Bedford County: Two hundred residents were without power. 40 roads, including US 460 near Bedford County line and VA 24 west of US 29 were closed because of excess water.</p> <p>Campbell County: Residents of the apartment complex were rescued with boats. Brookneal was hit hard by rising water on the Staunton River. In Brookneal the Staunton crested at 39.7 feet Campbell County had excess water from Otter Creek, Seneca Creek and Falling River spilling into the Staunton. The historic Marysville Covered Bridge was destroyed. Trees were uprooted.</p>
September 18, 2003	<p>Hurricane Isabel was expected to take a northerly jog that spared central VA from the brunt of its wind and rain. At 5:15pm at least 3,000 residents from Roanoke and east to Lynchburg and Lovington were without power (American Electric). Declared state of emergency</p> <p>Appomattox County: Declared state of emergency; Appomattox county lost most of its power (supplied by Southside electric and Dominion power) said it would be several days before power was restored.</p> <p>Lynchburg City: Over three thousand people in the city were without power</p>

City of Lynchburg Flood Occurrences since 2006

Date	Description
6/28/2006	Widespread rains of 2 to 4 inches with local amounts up to 6 inches produced large river flooding along the James River and along the upper Roanoke River. The crest along the James River at Lynchburg was 19.74 feet at 1300 pm on the 28th
8/24/2010	City police reported that Sandusky Drive was closed between Rhonda Road and Greenwood Drive due to rapidly flowing water well over 6 inches in depth. A later report said the water from Burton Creek reached 2 feet of depth in the parking lot of Sandusky Park.

Amherst County Flood Occurrences since 2006

Date	Description
7/3/2004	Heavy rain producing thunderstorms caused flash flooding across parts of Tazewell, Wythe and Amherst counties. Streets were closed from flash flooding in Fall Mills, and Speedwell. Maple Creek flooded Warrick Barn Road in Lowesville.
9/30/2004	The remnants of Hurricane Jeanne brought torrential rains to Southwest Virginia during the 28th and 29th. This brought minor to major flooding to rivers in the area from late September into early October. On the James River, Buchanan, Holcomb Rock and Bremo Bluff had moderate flooding, while Covington, Lick Run, Lynchburg, Bent Creek and Scottsville experienced minor flooding. At Buchanan in Botetourt County, the river crested at 25.67 feet, where the flood stage is 17 feet. At Holcomb Rock in Amherst County, the river crested at 24.33 feet, where the flood stage is 22 feet.
11/29/2005	A period of heavier rains during the morning and afternoon of the 29th, produced flash flooding of the Piney River and adjacent streams in Amherst County. A gage along Piney River reached 12.06, the 4th highest level since 1949. Many roads in the county were closed.
11/29/2005	Rainfall of 4 to as much as 10 inches over a 36 hour period caused flooding along several creeks and rivers in counties along and either side of the Blue Ridge. Several roads were closed due to high water, especially in Amherst County.
6/28/2006	Widespread rains of 2 to 4 inches with local amounts up to 6 inches produced large river flooding along the James River and along the upper Roanoke River. The crest along the James River at Holcomb Rock was 22.74 feet at 800 am on the 28th. The crest along the James River at Lynchburg was 19.74 feet at 1300 pm on the 28th.
5/14/2009	South Fork Stovall Creek flooded portions of Route 130 in the Madison Heights community, resulting in the road being closed.
6/3/2009	A moderately unstable air mass and seasonably strong mid-level shear helped to produce widespread multicellular storms beginning in the early afternoon of June 3rd. The storms began primarily as hail-makers but later in the day transitioned to damaging winds across a fairly wide area.
6/9/2009	A tree was blown over near intersection of Route 29 and State Route 610.
8/22/2009	Trees were blown down on Route 151 near Clifford.
1/25/2010	Heavy rain caused a stream to leave its bank and a flash flood flowed over Buffalo Springs Turnpike. The road was then closed. Damage values are estimated.
1/25/2010	Heavy rain prompted flash flooding on Horsley Creek and the flowing water went across Wagon Trail Road. The road was closed. Damage values are estimated.
1/25/2010	Flash flooding caused a portion of Turkey Mountain Road to wash out. Damage values are estimated. Abundant rain advanced north into the region in advance of an area of low pressure to the west while a frontal boundary remained draped over the region.

Amherst County Flood Occurrences since 2006

Date	Description
1/25/2010	Heavy rains caused a culvert to collapse on Mansion Way. Damage values are estimated. Abundant rain advanced north into the region in advance of an area of low pressure to the west while a frontal boundary remained draped over the region
5/28/2010	Flash flooding occurred along Woodson Road as heavy rain caused streams to leave their banks. Damage values are estimated. A backdoor cold front pushed south into the region and stalled along the crest of the Blue Ridge along a north to south orientation. During the afternoon and early evening, numerous thunderstorms developed along and near the front. Some of these produced damaging wind and hail along with flash flooding.
4/16/2011	Flooding was occurring along Buffalo Springs Turnpike. A strong closed upper level low pressure moved across the Ohio valley, producing a variety of extreme weather across southwest Virginia.

Appomattox County Flood Occurrences since 2006

Date	Description
10/7/2006	<p>Across the county roads were flooded and closed. 30 to 35 mph winds brought small trees down thanks to the saturated soil around their root systems. Since the 5th of October, rainfall to some degree had been falling over portions of southwest and south central Virginia. Rainfall amounts were on the order of four inches in the 48 hour period. On the 7th, a slow moving area of upper level low pressure helped to maintain a persistent area of heavy rain over this same region. Rainfall amounts were on the order of an additional 2 inches, which was enough to prompt flash flooding in Buckingham and Appomattox Counties. Also, with the ground now saturated, wind speeds of only 30 to 35 mph were able to down some trees.</p>
7/28/2007	<p>Thunderstorms produced two to three inches of rain over parts of Appomattox County. This heavy rain prompted Phelps Creek to leave its banks. Heavy rain producing, slow moving thunderstorms helped to promote flash flooding over parts of the area.</p>
9/6/2008	<p>Route 627 was closed near the Appomattox-Prince Edward County line due to high water running over the road. Tropical Storm Hanna made landfall along the North Carolina/South Carolina border during the early morning of September 6th as a strong tropical storm.</p>
1/25/2010	<p>Heavy rain prompted a flash flood to occur across Highway 460. Damage values are estimated. Abundant rain advanced north into the region in advance of an area of low pressure to the west while a frontal boundary remained draped over the region. An average of 2 to 5 inches of rain fell from this system onto an already saturated ground from recent snow melt and rainfall. The heavy rain contributed to widespread flash flooding, mudslides, areal flooding, and river flooding.</p>
8/16/2010	<p>Stonewall Creek was reported out of its banks. A retired NWS employee reported 3.78 inches of rain. An area of showers and thunderstorms moved from west to east across southwest Virginia during the afternoon and few stronger embedded cells were able to produce wind gusts up to severe levels. Another cell tracked from eastern Campbell across Appomattox County and produced very heavy rain in a short time, with reports of up to 4 inches of rain and flash flooding.</p>

Bedford County Flood Occurrences since 2006

Date	Description
9/8/2004	The remnants of Tropical Depression Frances brought a brief tornado, flash flooding, and a few severe thunderstorms to portions of Southwest Virginia during the late morning and early afternoon of the 8th. In Buckingham County, an F0 tornado briefly touched down 2 miles WNW of Gold Hill, damaging and snapping numerous trees. In Bedford County, flash flooding near Stewartsville closed Highway 619. In Franklin County, a severe thunderstorm brought down several trees in Rocky Mount. In Campbell County, a severe thunderstorm downed trees across Route 683 near Evington.
9/28/2004	The Remnants of Hurricane Jeanne resulted in heavy rains which created widespread flash flooding on 28th of September in Floyd, Franklin, Patrick, Bedford and Roanoke counties and the City of Salem. Several roads were closed due to flooding in Floyd, Franklin, Patrick, Bedford and Roanoke counties.
6/27/2006	Widespread rains of 2 to 4 inches with local amounts up to 6 inches produced large river flooding along the James River and along the upper Roanoke River. The crest along the James River at Buchanan was 18.73 feet at 1145 am on the 26th. The crest along the James River at Holcomb Rock was 22.74 feet at 800 am on the 28th. The crest along the James River at Lynchburg was 19.74 feet at 1300 pm on the 28th.
11/16/2006	Highway 122 closed due to flooding. EPISODE NARRATIVE: Plenty of moisture ahead of a cold front moving across the Ohio and Tennessee Valleys led to heavy rainfall. As much as 4 inches of rain fell during this event leading to some flash flooding across portions of western Virginia on the 16th of November.
4/9/2007	Cold arctic high pressure over the region allowed for sub-freezing temperatures after a period of relatively mild weather in late March and very early April 2007.
5/19/2009	A local stream flooded Triggs Road, 4 miles south-southwest of Goode, causing it to collapse. EPISODE NARRATIVE: A boundary was draped across southwest Virginia during the evening of May 14th and slowly drifted south toward the North Carolina border May 15th. Showers with embedded thunderstorms slowly moved along this boundary, setting up a training of heavy rains. This caused flash flooding over portions of southwest Virginia from the New River Valley east into the Piedmont.
1/25/2010	Heavy rain in steep terrain help to cause a mudslide that covered the intersection of Route 221 and Brookhill Road. Damage values are estimated.
9/30/2010	Bethel Church Road was closed due to flash flooding. Damage values are estimated. EPISODE NARRATIVE: On the 25th of September, a powerful area of low pressure was located over the southeastern U.S. Several weak centers of low pressure formed over the Gulf Coast area from the 26th to 28th and pushed northeast along a stationary boundary bringing very high moisture from the Gulf and Atlantic Ocean.

Bedford County Flood Occurrences since 2006

Date	Description
12/1/2010	Flash flooding prompted the closure of Foster Road between Quarles Road and Nester Road where it crosses Goose Creek. Damage values are estimated. EPISODE NARRATIVE: A major storm affected the eastern U.S. during the period of November 30 - December 1 as a powerful upper low and surface system moved into the Great Lakes proving an extended period of deep southerly flow across the region.
8/13/2011	Heavy rains of 3 to 5 inches in several hours caused road closures in several locations. The Bedford Cooperative observer had 4.77 inches ending at 8 AM on the 14th. Roads close due to flooding included Highway 43 from Fancy Farm Road north Peaks of Otter; the intersection of Forbes Mill road and Jopling Road; intersection of Woods Road and Peaks Road and the intersection of Glass Hill Road and Otterville Road.
8/25/2011	A total of 46 trees were uprooted or snapped at the trunk. Many of them were very large trees located on Mack Updike Circle near the intersection of State Roads 24 and 122. All appeared be blown down toward the east.

Campbell County Flood Occurrences since 2006

Date	Description
7/27/2007	Thunderstorms over Campbell County produced heavy rain that prompted Seneca Creek to leave its banks. Heavy rain producing, slow moving thunderstorms helped to promote flash flooding over parts of the area.
5/15/2009	Numerous roads were flooded by Buffalo Creek in the Timberlake area. A boundary was draped across southwest Virginia during the evening of May 14th and slowly drifted south toward the North Carolina border May 15th. Showers with embedded thunderstorms slowly moved along this boundary, setting up a training of heavy rains. This caused flash flooding over portions of southwest Virginia from the New River Valley east into the Piedmont.
1/25/2010	Flash flooding caused Stage Road to be impassable. Damage values are estimated. Abundant rain advanced north into the region in advance of an area of low pressure to the west while a frontal boundary remained draped over the region. An average of 2 to 5 inches of rain fell from this system onto an already saturated ground from recent snow melt and rainfall. The heavy rain contributed to widespread flash flooding, mudslides, areal flooding, and river flooding.

Historical Winter Storm Occurrences In Region 2000 (Includes Ice/Snow)



1950-2011

Primary Sources: National Oceanic and Atmospheric Administration, Historical Society (Newspapers)

Date	Damages
June 1, 1993	70+ winds knocked down trees and power lines. Two million dollars worth of damages.
December 20, 1993	A winter storm passed through the region, surprising the area with up to six inches of snow. Dozens of minor accidents were reported, but no power outages. The heavier snow was concentrated in Amherst, Appomattox and Campbell counties.
December 28, 1993	A thin layer of ice covered roads and sidewalks and shut down government and private businesses in Lynchburg and the surrounding counties for 1-2 days.
February 11, 1994	<p>More than four inches of ice and sleet covered the entire region, knocking out heat and electricity for over 40,000 homes and businesses. The ice also caused numerous structural leaks. The ice storm was followed by rain, causing flooded basements and standing water on roadways. The damage exceeded \$25 million in Central Virginia. Schools were closed for 3 to 5 days.</p> <p>Amherst County: Ice storm was in February 11-13- declared in April --Matt recorded this event. 2.6 million dollars in estimates from the federal government and city estimates.</p> <p>Bedford County: Damages totaled just over \$1 million. Mayor Shelton declared a local emergency due to fallen trees and power outages. Almost the entire county was without power for over a day. About \$50,000 damage was reported alone from a car-transport truck sliding into another vehicle and off the road on U.S. 460 at Blue Ridge Avenue.</p> <p>Campbell County: Utility damage was estimated at \$5 million; agricultural losses were estimated at \$320,000.</p> <p>Lynchburg City: Storm damage estimates surpassed \$19 million. A large tree fell and crushed a car at Lynchburg College and a small section of roof collapsed at K mart under the weight of the ice. Rivermont Ave, Boonsboro Rd, Langhorne Rd, Old Forest Rd, and Hollins Mill Rd were all completely blocked by downed trees. Four schools were used as shelters for those without power. Almost 7,000 residents were without power for over five days.</p>

Date	Damages
January 30, 1995	Six to eight inches of snow fell across the region, catching the area by surprise. Most schools and offices were closed. Appomattox man killed on 460 in Campbell County during snow storm. Temperatures dropped into the 20s with wet roads beginning to freeze. VDOT crews scattered about 500 tons of sodium chloride on the roads. Five inches of snow fell between Friday and Monday, with nine inches on the Blue Ridge parkway.
December 7, 1995	Six to eight inches of snow fell across the region, catching the area by surprise. Most schools and offices were closed. Lynchburg City: Lynchburg General Hospital reported several snow-related accidents.
December 30, 1995	Five inches of snow fell between Friday and Monday, with nine inches on the Blue Ridge parkway. Appomattox man killed on 460 in Campbell County during snow storm. Amherst County: Temperatures dropped into the 20s with wet roads beginning to freeze. VDOT crews scattered about 500 tons of sodium chloride on the roads.
January 6, 1996	Winter weather brought snow and high winds to central Virginia, with expected snowfalls to reach 18-24 inches. Lynchburg City: Snowfall by Sunday (January 7) reached 2.5 inches
January 12, 1996	More snowfall in Central Virginia caused road crews to work overtime. Government offices opened one hour late. Lynchburg City: snowfall accumulation reached 2.7 inches
January 19, 1996	Heavy rains, melting snow, and high winds Friday morning shut down schools, closed roads, and flooded low-lying areas. Problems continued when the James River crested downstream from Lynchburg through Amherst and Nelson Counties. Bedford County: Portions of US 460 near Montvale were closed from flooding. Small trees were felled with no injuries were reported. The James River crested upstream from Lynchburg near Big Island, flooding portions of Georgia-Pacific paper mill. Lynchburg City: City officials evacuated residential roads near the James River. Residents on Hydro Street and Ruesens Road were also evacuated. Houses along Timberlake Drive suffered minor flood damages. Town of Altavista: Lynch Creek flooded portions of Pittsylvania Avenue, Main Street, and 7 th Street. The Altavista Life Saving building as well as Shreve Park and War Memorial Park suffered water damage. Schools were closed due to dangers of flash flooding.

Date	Damages
February 3, 1996	<p>Snow continued to fall in Central Virginia, with snowfalls estimated around 13-24 inch totals. Snowfall in surrounding counties reported snowfall totals of 10-14 inches. Wind chill brought temperatures down to 15-25 degrees below zero.</p> <p>Lynchburg City: snowfall reported at 11.4 inches.</p> <p>Appomattox County: snowfall totaled 9 inches</p> <p>Amherst County: All roads in Amherst were impassable.</p>
February 9, 1996	<p>Icy roads caused dozens of accidents Friday morning.</p> <p>Amherst County: schools closed on Friday.</p> <p>Lynchburg: 16 vehicle accidents reported.</p>
February 16, 1996	<p>Eight inches of snowfall on Friday pushed Lynchburg City seasonal totals to 51.2 inches, a record. Snow closed schools and roads in the area. Area counties appealed for waivers due to missed school days.</p>
March 7, 1996	<p>Lynchburg: Five inches of snow blanketed Lynchburg City on Thursday and Friday, raising the city's winter snowfall to 56.4 inches. A couple of minor injuries due to automobile accidents.</p>
April 10, 1997	<p>Hard freeze in Central Virginia caused damage to local peach and apple orchards. Temperatures dropped to 24 degrees F.</p>
December 27, 1997	<p>Moderate to occasionally heavy snow developed in southwestern Virginia during the early morning hours on the 27th and continued well into the evening hours. Snow accumulations were mostly from 4 to 7 inches. Hazardous road conditions resulted in numerous traffic accidents.</p>
December 29, 1997	<p>Moderate to occasionally heavy snow developed in southwestern Virginia during the early morning hours on the 27th and continued well into the evening hours. Snow accumulations were mostly from 4 to 7 inches. Area totals were 2 inches in Appomattox County, up to six inches in Lynchburg, Bedford, Campbell, and Amherst. Hazardous road conditions resulted in numerous traffic accidents.</p> <p>Lynchburg: On Lynchburg expressway, slick conditions cause problem southbound into the City between Main and Grace streets, also Langhorne Road north of Cranehill drive.</p>
January 15, 1998	<p>Freezing rain and freezing drizzle on the 15th resulted in ice buildup on trees in excess of one quarter inch in portions of Patrick, Henry, Floyd, Pulaski, Giles, Montgomery, Roanoke, Botetourt, Allegheny, Campbell, and Pittsylvania Counties. The weight of the ice broke off tree limbs and knocked down power lines.</p>
February 4, 1998	<p>Freezing rain and freezing drizzle from the early afternoon hours on the 4th through around noon on the 6th at elevations above 2800 feet resulted in major accumulations of ice on exposed objects. At elevations above 3600 feet, ice accumulations were up to 5 inches thick. The weight of the ice brought down power lines, power poles, and trees.</p> <p>Appomattox County: Few minor roads were closed</p> <p>Lynchburg: Minor flooding was reported. Winds and saturated ground caused trees to be knocked down, causing about 2,300 AEP customers to lose power.</p>

Date	Damages
December 23, 1998	<p>Sleet and freezing rain developed during the morning hours on the 23rd and continued into late afternoon hours. Freezing rain redeveloped overnight and continued into the late morning and early afternoon hours on the 24th. Ice accumulated from 1/4 to 1/2 inch on exposed objects in most areas. However, there were some ice accumulations around one inch. The weight of the ice downed trees limbs and power lines which resulted in numerous power outages. Some people were without power for a few days. Ice covered roads and bridges resulted in numerous traffic accidents and some injuries.</p> <p>Lynchburg: Sleet and freezing rain started after lunchtime in Lynchburg and wreaked havoc on rush-hour roadways through the area. State and local police reported dozens of wrecks throughout the region, including several on US 460 and US 29 that tied up rush hour traffic.</p>
January 25, 2000	<p>Snow developed around midnight on the 25th and ended around mid morning on the 25th. Snow accumulations ranged from 2 to 8 inches in Bedford and Henry counties, to 10 to 16 inches east of a line from Lynchburg to Danville.</p> <p>Appomattox County: Snow Totals: 6 to up to 10 inches; Worst since 1996. This surprise snow storm was called by a larger than normal Nor'easter which caused widely varying snowfall throughout the State. It took several days to clear roads, especially in Amherst, Appomattox, and Campbell Counties.</p> <p>Campbell County: Snow Totals: 7 to Up to 12 inches; hardest hit county in region; minor power outage in Concord.</p> <p>Lynchburg: Snow Totals: Up to 7 inches; Due to volume of snow city had to use contract labor for snow removal, where snow was dumped into the James River; minor power outage in Boonsboro area.</p>
February 22, 2001	<p>A burst of heavy snow during the morning of the 22nd accumulated from 2 to 4 inches resulting in hazardous travel conditions. The snowfall formed a dangerous icy sheet on roadways as it froze at sunset causing over 150 accidents in the area with no serious injuries.</p> <p>Lynchburg City: Accidents reports on Lynchburg Expressway near Stadium Road and 2312 Old Forest Road, and on US 501 on bridges near old forest road.</p>
January 2, 2002	<p>Snow developed during the late evening on the 2nd and accumulated 5 to 10 inches before ending midday on the 3rd. Campbell County received from 6 to 9 inches, while Altavista received 7 inches.</p> <p>Campbell County: Accidents from slick road included VA 40 east of Brookneal and on US 501 near Brookneal.</p>
January 19, 2002	<p>Snow developed during the morning of the 9th and accumulated 5 to 7 inches before changing to sleet and freezing rain, then ending late in the evening.</p>
December 4, 2002	<p>Snow during the afternoon of the 4th through early morning of the 5th accumulated from 5 to 10 inches across the area. Five inches of freezing precipitation covered the ground and roads in Lynchburg. Appomattox, Bedford and Campbell, Lynchburg and Amherst had totals varying from 4 to 6 inches. Numerous accidents were reported on snow and ice covered roads. Three car pileups on US 460 near Appomattox, US 501 in Lynchburg.</p>

Winter Storm Occurences Historic Record

Date	Damages
January 16, 2003	Snow accumulated 3 to 6 inches across northern Campbell County and Lynchburg, with over 60 automobile accidents reported. Major roads were clogged and traffic on highways, such as US 29 was Re-routed. An 8 car pileup was reported in the 1700 block of Wards Ferry Road.
January 30, 2003	Snow during the morning and afternoon of the 30th accumulated 4 to 7 inches across Bedford, Campbell, and Buckingham counties. Lynchburg: dumped snow up to 7 inches in the Lynchburg area.
February 6, 2003	Snow during the afternoon of the 6th through the early morning of the 7th accumulated from 5 to 8 inches. A few cars slid into ditches on wards ferry road.
February 15, 2003	Snow, sleet, and freezing rain fell from late on the 15th through much of the 17th. Ice accretions ranged from 1/4 to 1/2 of an inch. Snow and sleet accumulations ranged from 5 to 8 inches in the Allegheny Highlands and Appomattox and Buckingham Counties in the east. Virginia declared state of emergency - national guard brought in to help with snow removal. As of Sunday afternoon Campbell and Bedford received 1.5 inches of icy precipitation, Amherst county received 3 inches. Amherst county's primary and secondary roads were in severe condition.
February 26, 2003	Snow and ice developed during the late afternoon of the 26th and continued through the evening of the 27th. Ice accretion ranged from 1/4 of an inch to as much as an inch in southern Pittsylvania and Halifax counties downing numerous trees and power lines. In addition, snow fall amounts across Bedford, Campbell, and Appomattox Counties ranged from 4 to 6 inches. Lynchburg City: Lynchburg police reported 24 accidents and 14 disabled vehicles. Top 10 winters of all-time.
January 10, 2004	Small snow storm blankets central VA. Lynchburg received more than 2 inches of snow overnight.
January 25, 2004	A winter storm on the 25th dumped from 4 to 7 inches across Western Virginia. The higher amounts fell from Roanoke County southwest into portions of the New River Valley, with local higher amounts in portions of Campbell County, in the piedmont. Numerous accidents were reported, due to slick roads, but the majority across the region was minor. Lynchburg: Lynchburg police and surrounding counties reported accidents as conditioned worsened. Four inches of snow at the Lynchburg regional airport, this closed briefly.
February 15, 2004	A potent upper level storm system moved across North Carolina during the afternoon and evening of the 15th, moving off the coast early on the 16th. This storm brought a swath of heavy snow to a good portion of Western Virginia. Amounts ranged from 4 to 8 inches in a path from the Mountain Empire of Southwest Virginia, east to the Blue Ridge from Floyd County south to the North Carolina border, then east into the foothills and piedmont of southern Virginia. The highest amounts of 7 to 8 inches were reported in portions of Smyth, Wythe, Grayson, Floyd and Franklin counties. Campbell County: Numerous accidents. Some on the US 501 south of Rustburg. US 460.

Amherst County Winter Storm Occurrences (Ice/Snow) since 2006

Date	Description
1/29/2005	A low pressure system tracking along the east coast brought a wintry mix of precipitation to the region. Ice accretion was one quarter of an inch in most locations with a few isolated locations in Charlotte Co. receiving one half inch accretion. Snowfall was very much a secondary element with 1 to 3 inches being the norm, except for Grayson Co., where amounts ranged from 4 to 6 inches.
2/28/2005	A very strong winter storm moved across the southeastern U.S., then up the east coast during the 28th of February. This storm brought heavy snow amounts to most of southwestern Virginia from the piedmont to the mountains. The snow was mixed at times with sleet across the piedmont. Snowfall totals ranged from 5 to 10 inches across most of the area. The highest amounts occurred along the Blue Ridge mountains, with 10 to 12 inches across western Franklin County, into southern portions of Roanoke County, including the city. The amounts were lighter in the piedmont with 3 to 6 inches on average.
12/9/2005	A winter storm produced a mixture of snow, sleet and freezing rain across southwest Virginia on the morning of 9th of December. This storm brought significant ice accumulation of a quarter to a half inch of ice to southwest Virginia. Across Bath county, 5 inches of snow and sleet fell. Virginia State police reported several vehicle accidents in Campbell, Amherst, and Tazewell counties.
12/15/2005	A winter storm moved across southwest Virginia on the afternoon and night of the 15th of December. A band of sleet, snow and freezing rain moved through the region. As the storm progressed east, it coated the area with a 1/4 to 3/4 inch of ice. Appalachian Power reported that falling trees, tree limbs and power lines interrupt electric service to 38,000 customers especially in Campbell, Patrick, Henry and Carroll counties. Close to 10,000 customers lost power in the Lynchburg area. The Virginia State Police reported numerous accidents.
2/13/2007	Low pressure moved from the Tennessee Valley to the Virginia coast bringing a period of freezing rain to portions of southwest Virginia. Ice accretions ranged from one quarter to one half inch, with up to an inch and a quarter of ice on the Blue Ridge Parkway in Floyd County. The ice brought tree limbs down and scattered power outages.
4/7/2007	Cold arctic high pressure over the region allowed for sub-freezing temperatures after a period of relatively mild weather in late March and very early April 2007. The mild weather helped to jump start the growing season across the area, and freezing temperatures, as low as the lower to middle 20s F, lead to significant crop damage.
4/8/2007	Apples and pears experienced a 50% loss. Crop damage and dollar amounts listed represent the losses for 3 consecutive nights of freezing weather. Cold arctic high pressure over the region allowed for sub-freezing temperatures after a period of relatively mild weather in late March and very early April 2007. The mild weather helped to jump start the growing season across the area, and freezing temperatures, as low as the lower to middle 20s F, lead to significant crop damage for most counties. All reports of monetary losses in this report are preliminary estimates.

Amherst County Winter Storm Occurrences (Ice/Snow) since 2006

Date	Description
12/15/2007	Ice accumulations of 0.25 to 0.40 occurred across Roanoke county. Highest ice accumulations fell across Bent Mountain. Low pressure moving northeast across the region created rain in subfreezing temperatures which resulted in a quarter to one inch of ice accumulation. Ice accumulations downed trees and power lines.
2/10/2008	A fast moving arctic front swept across the area February 10th. In its wake, very strong west winds and wind gusts ensued over the area. Each county in southwest Virginia received wind damage. These high winds also touched off several wildfires. Three of the largest wildfires were Little Cuba (2700 acres) in Craig County, Black Horse (1500 acres) in Bedford County, and Green Ridge Mountain (about 4000 acres) in Roanoke County. Despite the size of these fires, no personal property was damaged or destroyed.
3/4/2008	Trees were downed across northern Amherst county. A strong cold front moving through the area brought severe thunderstorms with damaging winds.
3/1/2009	Five to ten inches of snow fell across the county causing sporadic power outages and travel problems. March was ushered in with the biggest and for most of the area the only significant snowstorm of the 2008-2009 season.
12/18/2009	Snowfall amounts ranged from 14 inches in the southeast to 18 inches in the northwest part of the county. Very hazardous travel conditions prevailed during the storm across the entire region.
1/30/2010	Snowfall amounts across Amherst county totaled 10.0 inches at Hot Springs and 6.8 inches at Millboro.
2/5/2010	Light to moderate moved into the county during the early morning hours on the 5th. The snow turned to a mixture of snow, freezing rain, and sleet during the afternoon, before ending as snow late at night into the day on the 6th. Most of Amherst county saw between 6 and 9 inches of snow. Roadways became slick, with many reports of vehicles sliding off roads across the state.
12/16/2010	Snow amounts ranged from 3.5 inches near Naola to 5.0 inches at Lowesville. Some light sleet and freezing rain fell on top the snow at the conclusion of the event. Damage values are estimated.

Appomattox County Winter Storm Occurrences (Ice/Snow) since 2006

Date	Description
2/13/2007	Low pressure moved from the Tennessee Valley to the Virginia coast bringing a period of freezing rain to portions of southwest Virginia. Ice accretions ranged from one quarter to one half inch, with up to an inch and a quarter of ice on the Blue Ridge Parkway in Floyd County. The ice brought tree limbs down and scattered power outages.
1/27/2009	Ice accretion across the county was one-quarter of an inch. This amount of ice brought a few limbs down in the community of Madison Heights and scattered trees down countywide. Damage values are estimated. Sub-freezing air was in place across the region as a warm front moved north into the area. Rain associated with the front fell and encountered the frigid air at the surface. The result was the formation of a layer of ice over mainly trees and other elevated surfaces. When the event was over, there was a coating of ice between one-quarter of an inch and one-half of an inch.
3/1/2009	Five to ten inches of snow fell across the county causing sporadic power outages and travel problems. March was ushered in with the biggest and for most of the area the only significant snowstorm of the 2008-2009 season. A complex and deep surface and upper-level system brought rain to much of the area late 28 February, which changed over to snow in the western portion of the region. A secondary low pressure area tracked over the Carolinas to the Virginia coast early on March 1, allowing all areas to eventually change over to snow. Snow totals ranged from less than an inch in the far west to over 12 inches in parts of the piedmont. There were reports of trees down and power outages in portions of Campbell, Amherst, and Appomattox counties with up to 14 inches of snow reported near Huddleston in Bedford County. The 10 inches that fell at Lynchburg was the highest 1-day amount since February, 1996.
12/18/2009	Snowfall amounts ranged from 10 inches in the southeast to 14 inches in the northwest part of the county. Very hazardous travel conditions prevailed during the storm across the entire county. Low pressure tracked from the northeast Gulf coast early on December 18th reaching a position near Alma, Georgia as a 997 mb low by Friday the 18th at 5 PM EST. The storm continued moving northeast and deepened to a 986 mb low near Cape Hatteras by 10 AM December 19th. Heavy snow began around midday on the 18th and snows rapidly accumulated to warning criteria levels by late afternoon or early evening in all of the Virginia counties. All forms of travel were rendered extremely difficult for several days due to this storm and numerous vehicle accidents were reported. Final snow totals ranged from less than 6 inches in the far southeast counties to over 25 inches in parts of Alleghany, Rockbridge, Montgomery and Bath counties. This was the biggest snowstorm to affect western Virginia since the January 6-8, 1996 storm. Several stations set December single-storm snowfall records from this storm including Roanoke and Blacksburg.

Appomattox County Winter Storm Occurrences (Ice/Snow) since 2006

Date	Description
1/30/2010	Snowfall amounts across the county totaled 10.0 inches at Hot Springs and 6.8 inches at Millboro. A cold front moved through the area on January 28th. Behind this front cold air was left in its wake. On the 29th, an area of low pressure moved the northern edge of the Gulf of Mexico before heading north and strengthening along the eastern coast of the U.S. on the 30th. This series of events allowed for plenty of moisture to fall as snow across the area with total accumulations ranging from the five to fifteen inch range.

Bedford County Winter Storm Occurrences (Ice/Snow) since 2006

Date	Description
12/19/09	Snow amounts ranged from 10 inches in the southeast to 15 inches in the northwest. Very hazardous travel conditions prevailed during the storm across the entire county.
1/21/10	ice accretion totaled 0.38 inches three miles east of Sylvatus, 0.33 inches in Gladesboro, 0.25 inches in Fancy Gap, and 0.25 inches three miles west of Fries Junction. EPISODE NARRATIVE: Cold high pressure was in place across the area as warm, moist air overspread the region in association with a warm front moving north across the region. The result was rain that fell onto sub-freezing surface that produced up to one-half inch of ice.
1/29/10	Snowfall amounts across the county totaled 10.0 inches at Daleville and 9.0 inches at Buchanan.
2/5/10	Light to moderate moved into the county during the early morning hours on the 5th. The snow turned to a mixture of rain, freezing rain, and sleet during the afternoon, before ending as snow late at night into the day on the 6th. Snowfall accumulations of 7 to 8 inches were reported across the county.

Campbell County Winter Storm Occurrences (Ice/Snow) since 2006

Date	Description
2/1/2008	A quarter of an inch of glaze occurred across the western portions of the county, including Lynchburg.
3/2/2009	Four to twelve inches of snow fell across the county causing sporadic power outages and travel difficulties. March was ushered in with the biggest and for most of the area the only significant snowstorm of the 2008-2009 season.
12/18/2009	Snow amounts ranged from 10 inches in the southeast to 15 inches in the northwest. Very hazardous travel conditions prevailed during the storm across the entire county.
1/29/2010	Snowfall amounts across the county totaled 10.0 inches at Daleville and 9.0 inches at Buchanan.
2/6/2010	Light to moderate moved into the county during the early morning hours on the 5th. The snow turned to a mixture of snow, freezing rain, and sleet during the afternoon, before ending as snow late at night into the day on the 6th. Most of the county saw between 6 and 9 inches of snow. Roadways became slick, with many reports of vehicles sliding off roads across the state. A strong low pressure system moved from the Gulf Coast to off the North Carolina coast. A secondary low moved west of Virginia over Kentucky, bringing a nose of warm air in aloft. This led to a mixture of snow, sleet, freezing rain, and rain across southwest Virginia, with many areas seeing significant snow or ice accumulations.

Historical Drought Occurrences

In Region 2000



1950-2011

Primary Sources: National Oceanic and Atmospheric Administration, Historical Society (Newspapers)

Amherst County Drought Occurrences since 2006

Date	Description
10/2/2007	Drought conditions increased into the Severe (D2) Category on October 2nd and remained at that level of severity through October 30th before dropping into the Abnormally Dry (D0) Category. Apples were of poor size and there was no second hay planting. Mandatory water restrictions were in place for Amherst County for most of the month.

Appomattox County Drought Occurrences since 2006

Date	Description
10/2/2007	Drought conditions increased into the Severe (D2) Category on October 2nd and remained at that level of severity through October 30th before dropping into the Abnormally Dry (D0) Category. Apples were of poor size and there was no second hay planting. Mandatory water restrictions were in place for Amherst County for most of the month. Drought conditions worsened from September into October with parts of southwest Virginia entering into the Extreme (D3) Category from Severe (D2) the month before. Elsewhere other counties entered into or remained in the Severe (D2) Category.
1/29/2008	A Moderate (D2) drought existed over the eastern part of the county. During the last week of the month, some Virginia counties had drought conditions worsen into the Moderate (D2) category of drought.
2/1/2008	Severe to extreme drought conditions persisted at the beginning of February, with the extreme drought confined to southwest Grayson County. By the end of the month, conditions had improved to moderate to severe, with severe conditions over the southwestern half of the county. Severe to Extreme Drought Conditions continued into February over portions of southwest Virginia. Mainly this area encompassed most of the piedmont, south to the North Carolina border, and west to the mountains. By the end of the month, conditions improved over the mountains and portions of the foothills.
3/1/2008	Several precipitation events impacted the region, helping to improve the drought status from severe (D2) to moderate (D1). As La Nina weakened during the month of March, the area received close to 84 percent of normal rainfall. This allowed drought conditions to improve across Virginia. Extreme (D3)drought conditions in the southeast corner of the region improved to severe (D2) drought conditions. Severe (D2) drought conditions only remained across far southern Virginia by the end of March.
8/31/2008	Severe drought conditions crept into the extreme southern areas of the county for the latter half of the month. Rainfall was mainly confined to the typical summertime showers and thunderstorms for much of the month of August. Drought conditions in the moderate category at the beginning of the month, worsened to severe by August 19th. The effects of the remnants of Tropical Storm Fay toward the end of the month in terms of the long-term drought were significant. Nearly all areas experienced a one category improvement in the September 2nd issuance of the U.S. Drought Monitor.

Bedford County Drought Occurrences since 2006

Date	Description
10/1/2007	The county began the month in the Severe (D2) Category of drought. It maintained this level of severity until October 30th when the drought category was downgraded to the Abnormally Dry (D0) Category. Voluntary water restrictions were in place for Bedford County for most of the month. EPISODE NARRATIVE: Drought conditions worsened from September into October with parts of southwest Virginia entering into the Extreme (D3) Category from Severe (D2) the month before. Elsewhere other counties entered into or remained in the Severe (D2) Category. Rainfall the last week of October helped to mitigate the drought severity with all but the counties in far southwest Virginia dropping below the Severe (D2) Category.
8/19/2008	Severe drought conditions crept into the extreme southern areas of the county for the latter half of the month. EPISODE NARRATIVE: Rainfall was mainly confined to the typical summertime showers and thunderstorms for much of the month of August. Drought conditions in the moderate category at the beginning of the month, worsened to severe by August 19th. The effects of the remnants of Tropical Storm Fay toward the end of the month in terms of the long-term drought were significant. Nearly all areas experienced a one category improvement in the September 2nd issuance of the U.S. Drought Monitor.

Campbell County Drought Occurrences since 2006

Date	Description
9/1/2007	Hay, grain, soy and tobacco production was down forty to fifty percent due to the drought. The southwest portion of Campbell county had the greatest losses. Drought conditions worsened across southwest Virginia, as seventeen counties fell into a severe drought (D2) on September 1st. This severe drought continued through the end of September. Crop damage estimates are from county extension offices.
10/1/2007	The county began the month in the Severe (D2) Category of drought. It maintained this level of severity until October 30th when the drought category was downgraded to the Abnormally Dry (D0) Category. Voluntary water restrictions were in place for Bedford County for most of the month. Drought conditions worsened from September into October with parts of southwest Virginia entering into the Extreme (D3) Category from Severe (D2) the month before.
1/29/2008	A Moderate (D2) drought existed over the eastern part of the county. During the last week of the month, some Virginia counties had drought conditions worsen into the Moderate (D2) category of drought.
2/1/2008	Severe to extreme drought conditions persisted at the beginning of February, with the extreme drought confined to southwest Grayson County. By the end of the month, conditions had improved to moderate to severe, with severe conditions over the southwestern half of the county. Severe to Extreme Drought Conditions continued into February over portions of southwest Virginia. Mainly this area encompassed most of the piedmont, south to the North Carolina border, and west to the mountains. By the end of the month, conditions improved over the mountains and portions of the foothills.
3/25/2008	Several precipitation events impacted the region, helping to improve the drought status from severe (D2) to moderate (D1). As La Nina weakened during the month of March, the area received close to 84 percent of normal rainfall. This allowed drought conditions to improve across Virginia. Extreme (D3) drought conditions in the southeast corner of the region improved to severe (D2) drought conditions. Severe (D2) drought conditions only remained across far southern Virginia by the end of March.
8/19/2008	Severe drought conditions crept into the extreme southern areas of the county for the latter half of the month. Rainfall was mainly confined to the typical summertime showers and thunderstorms for much of the month of August. Drought conditions in the moderate category at the beginning of the month, worsened to severe by August 19th. The effects of the remnants of Tropical Storm Fay toward the end of the month in terms of the long-term drought were significant. Nearly all areas experienced a one category improvement in the September 2nd issuance of the U.S. Drought Monitor.

Appendix 5.3

FIRM Status by

Locality



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Community Information System

Release 4.05.04.00, 03/31/2011 -- Build 045,

Community Overview

Community: AMHERST COUNTY * State: VIRGINIA
County: AMHERST COUNTY CID: 510010

Program: Regular Emergency Entry: 03/01/1974 Regular Entry: 07/17/1978
Status: PARTICIPATING Status Effective: 07/17/1978
Current Map: 09/19/2007 Study Underway: NO Level of Regs: D
FIRM Status: REVISED Initial FIRM: 07/17/1978
FHB Status: SUPERCEDED BY FIRM Initial FHB: 11/22/1974

Probation Status:
Probation Effective: Probation Ended:
Suspension Effective: Reinstated Effective:
Withdrawal Effective: Reinstated Effective:

CRS Class / Discount: Policies In Force: 46
Effective Date: Insurance in Force: \$9,848,800.00
CAV Date: 06/28/2011 Workshop Date: No. of Paid Losses: 38
CAC Date: GTA Date: 06/27/2011 Total Losses Paid: \$1,246,823.64
☐ Tribal Community Website: Sub. Damage Claims Since 1978: 20
☐ Upton Jones Claims

☐ HMGP Projects
☐ FMA Projects

☐ ICC Claims



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Community Information System

Release 4.05.04.00, 03/31/2011 -- Build 045,

Community Overview

Community: APPOMATTOX COUNTY * State: VIRGINIA
County: APPOMATTOX COUNTY CID: 510011

Program: Regular Emergency Entry: 02/11/1974 Regular Entry: 07/17/1978
Status: PARTICIPATING Status Effective: 07/24/1978

Current Map: 01/02/2008 Study Underway: NO Level of Regs: D
FIRM Status: REVISED Initial FIRM: 07/17/1978
FHB Status: SUPERCEDED BY FIRM Initial FHB: 08/02/1974

Probation Status:

Probation Effective:

Probation Ended:

Suspension Effective: 07/17/1978 Reinstated Effective: 07/24/1978

Withdrawal Effective:

Reinstated Effective:

CRS Class / Discount:

Policies in Force:

Effective Date:

Insurance in Force:

CAV Date: 05/08/2007 Workshop Date:

No. of Paid Losses:

CAC Date: 01/27/2003 GTA Date:

Total Losses Paid:

☐ Tribal
Community

Community Website:

Sub. Damage Claims Since 1978:

☐ Upton Jones Claims

☐ HMGP Projects

☐ ICC Claims

☐ FMA Projects


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Community Information System

Release 4.05.04.00, 03/31/2011 -- Build 045,

Community Overview

Community: BEDFORD COUNTY * State: VIRGINIA
 County: BEDFORD COUNTY CID: 510016

Program: Regular Emergency Entry: 01/16/1974 Regular Entry: 09/29/1978
 Status: PARTICIPATING Status Effective: 09/29/1978
 Current Map: 09/29/2010 Study Underway: NO Level of Regs: D
 FIRM Status: REVISED Initial FIRM: 09/29/1978
 FHBM Status: SUPERCEDED BY FIRM Initial FHBM: 04/25/1975

Probation Status:

Probation Effective:

Probation Ended:

Suspension Effective:

Reinstated Effective:

Withdrawal Effective:

Reinstated Effective:

CRS Class / Discount:

Policies in Force: 145

Effective Date:

Insurance in Force: \$36,887,300.00

CAV Date: 11/16/2009 Workshop Date:

No. of Paid Losses: 20

CAC Date:

GTA Date: 05/26/2011

Total Losses Paid: \$206,583.05

☐ Tribal
Community

Community Website: <http://www.co.bedford.va.us>

Sub. Damage Claims Since 1978: 2

☐ Upton Jones Claims

☐ HMGP Projects

☐ ICC Claims

☐ FMA Projects

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Community Information System

Release 4.05.04.00, 03/31/2011 -- Build 045,

Community Overview

Community: CAMPBELL COUNTY *

State: VIRGINIA

County: CAMPBELL COUNTY

CID: 510028

Program: Regular
Status: PARTICIPATING
Emergency Entry: 12/27/1973
Regular Entry: 10/17/1978
Status Effective: 10/17/1978Current Map: 08/28/2008
Study Underway: YES
Level of Regs: D
FIRM Status: ALL ZONE A, C
AND X - NO
ELEVATION
DETERMINED
Initial FIRM: 10/17/1978FHBM Status: SUPERCEDED BY FIRM
Initial FHBM: 11/22/1974

Probation Status:

Probation Effective:

Probation Ended:

Suspension Effective:

Reinstated Effective:

Withdrawal Effective:

Reinstated Effective:

CRS Class / Discount:

Policies in Force: 28

Effective Date:

Insurance in Force: \$7,078,900.00

CAV Date: 01/16/2008

Workshop Date:

12

CAC Date: 02/06/2003

GTA Date:

Total Losses Paid: \$503,766.42

☐ Tribal

Community Website:

Sub. Damage Claims Since 1978: 2

Community

☐ Upton Jones Claims☐ HMGP Projects☐ ICC Claims☐ FMA Projects[FAMS](#)[Log Out](#)



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Community Information System

Release 4.05.04.00, 03/31/2011 -- Build 045,

Community Overview

Community: BEDFORD, CITY OF
County: BEDFORD CITY
State: VIRGINIA
CID: 510015

Program: Regular
Status: PARTICIPATING
Emergency Entry: 03/12/1974
Regular Entry: 06/01/1978
Status Effective: 06/01/1978

Current Map: 09/29/2010
Study Underway: YES
Level of Regs: D
FIRM Status: REVISED
Initial FIRM: 06/01/1978
FIRM Status: SUPERCEDED BY FIRM
Initial FIRM: 06/28/1974

Probation Status:

Probation Effective:

Probation Ended:

Suspension Effective:

Reinstated Effective:

Withdrawal Effective:

Reinstated Effective:

CRS Class / Discount:

Effective Date:

CAV Date:

CAC Date: 03/06/2003

Workshop Date:

GTA Date: 07/20/2010

☐ Tribal

Community

Community Website: <http://www.bedfordva.gov>

☐ Upton Jones Claims

☐ HMGP Projects

☐ ICC Claims

☐ FMA Projects

Policies in Force: 2
Insurance in Force: \$78,000.00
No. of Paid Losses:
Total Losses Paid:
Sub. Damage Claims Since 1978:

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Community Information System

Release 4.05.04.00, 03/31/2011 -- Build 045,

Community Overview

Community: LYNCHBURG, CITY OF State: VIRGINIA
County: LYNCHBURG CITY CID: 510093

Program: Regular Emergency Entry: 09/18/1973 Regular Entry: 09/01/1978
Status: PARTICIPATING Status Effective: 09/01/1978

Current Map: 06/03/2008 Study Underway: YES Level of Regs: D
FIRM Status: REVISED Initial FIRM: 09/01/1978
FHBK Status: SUPERCEDED BY FIRM Initial FHBK: 08/09/1974

Probation Status:

Probation Effective:

Probation Ended:

Suspension Effective:

Reinstated Effective:

Withdrawal Effective:

Reinstated Effective:

CRS Class / Discount:

Policies in Force:

Effective Date:

Insurance in Force:

CAV Date: 06/28/2011 Workshop Date:

No. of Paid Losses:

CAC Date: 05/29/2003 GTA Date: 06/27/2011

Total Losses Paid:

☐ Tribal
Community

Community Website:

Sub. Damage Claims Since 1978:

☐ Upton Jones Claims☐ HMGP Projects☐ ICC Claims☐ FMA Projects



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Community Information System

Release 4.05.04.00, 03/31/2011 -- Build 045,

Community Overview

Community: AMHERST, TOWN OF State: VIRGINIA
County: AMHERST COUNTY CID: 510193

Program: Regular Emergency Entry: 02/07/1974 Regular Entry: 11/02/1977
Status: PARTICIPATING Status Effective: 11/02/1977

Current Map: 09/19/2007 Study Underway: NO Level of Regs: D
FIRM Status: REVISED Initial FIRM: 11/02/1977
FHB Status: SUPERCEDED BY FIRM Initial FHB: 01/31/1975

Probation Status:

Probation Effective:

Suspension Effective:

Withdrawal Effective:

Probation Ended:

Reinstated Effective:

Reinstated Effective:

CRS Class / Discount:

Effective Date:

CAV Date: 06/30/1992 Workshop Date:

CAC Date: 02/06/2007 GTA Date: 06/27/2011

☐ Tribal
Community

Community Website:

☐ Upton Jones Claims

☐ ICC Claims

☐ HMGP Projects

☐ FMA Projects

Policies in Force: 2
Insurance in Force: \$450,800.00
No. of Paid Losses: 29
Total Losses Paid: \$128,029.19
Sub. Damage Claims Since 1978: 2



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Community Information System

Release 4.05.04.00, 03/31/2011 -- Build 045,

Community Overview

Community: APPOMATTOX, TOWN OF State: VIRGINIA
County: APPOMATTOX COUNTY CID: 510194

Program: Regular Emergency Entry: 02/22/1974 Regular Entry: 05/25/1984
Status: PARTICIPATING Status Effective: 05/25/1984

Current Map: 01/02/2008 Study Underway: YES Level of Regs: B

FIRM Status: ALL ZONE A, C AND X - NO ELEVATION DETERMINED Initial FIRM: 05/25/1984

FHBM Status: SUPERCEDED BY FIRM Initial FHBM: 05/06/1977

Probation Status:

Probation Effective:

Suspension Effective:

Withdrawal Effective:

Probation Ended:

Reinstated Effective:

Reinstated Effective:

CRS Class / Discount:

Effective Date:

CAV Date: 08/27/1992 Workshop Date:

CAC Date: 01/30/2003 GTA Date:

☐ Tribal Community

Community Website:

☐ Upton Jones Claims

☐ HMGP Projects

☐ ICC Claims

☐ FMA Projects

Policies in Force:

Insurance in Force:

No. of Paid Losses:

Total Losses Paid:

Sub. Damage Claims Since 1978:



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Community Information System

Release 4.05.04.00, 03/31/2011 -- Build 045,

Community Overview

Community: BROOKNEAL, TOWN OF State: VIRGINIA
County: CAMPBELL COUNTY CID: 510030

Program: Regular Emergency Entry: 01/15/1974 Regular Entry: 03/01/1978
Status: PARTICIPATING Status Effective: 03/28/1978
Current Map: 08/28/2008 Study Underway: YES Level of Regs: D
FIRM Status: REVISED Initial FIRM: 03/01/1978
FHB Status: SUPERCEDED BY FIRM Initial FHB: 05/17/1974

Probation Status:

Probation Effective:

Probation Ended:

Suspension Effective: 03/01/1978

Reinstated Effective: 03/28/1978

Withdrawal Effective:

Reinstated Effective:

CRS Class / Discount:

Policies in Force:

Effective Date:

3

CAV Date:

01/16/2008 Workshop Date:

Insurance in Force:

\$589,400.00

CAC Date:

06/26/1992 GTA Date:

No. of Paid Losses:

Total Losses Paid:

Sub. Damage Claims Since 1978:

☐ Tribal

Community Website:

Community

☐ Upton Jones Claims

☐ HMGP Projects

☐ ICC Claims

☐ FMA Projects

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Community Information System

Release 4.05.04.00, 03/31/2011 -- Build 045,

Community Overview

Community: PAMPLIN CITY, TOWN OF State: VIRGINIA

County: APPOMATTOX COUNTY CID: 510228

Program: Regular Emergency Entry: 11/11/1974 Regular Entry: 02/12/1976

Status: PARTICIPATING Status Effective: 02/12/1976

Current Map: 10/02/2009 Study Underway: NO Level of Regs:

FIRM Status: ALL ZONE C&X
PUBLISHED
FIRM Initial FIRM: 10/02/2009

FHBM Status: NEVER MAPPED Initial FHBM:

Probation Status:

Probation Effective:

Probation Ended:

Suspension Effective:

Reinstated Effective:

Withdrawal Effective:

Reinstated Effective:

CRS Class / Discount:

Effective Date:

Policies in Force:

Insurance in Force:

No. of Paid Losses:

CAV Date:

Workshop Date:

CAC Date:

GTA Date: 09/16/2009

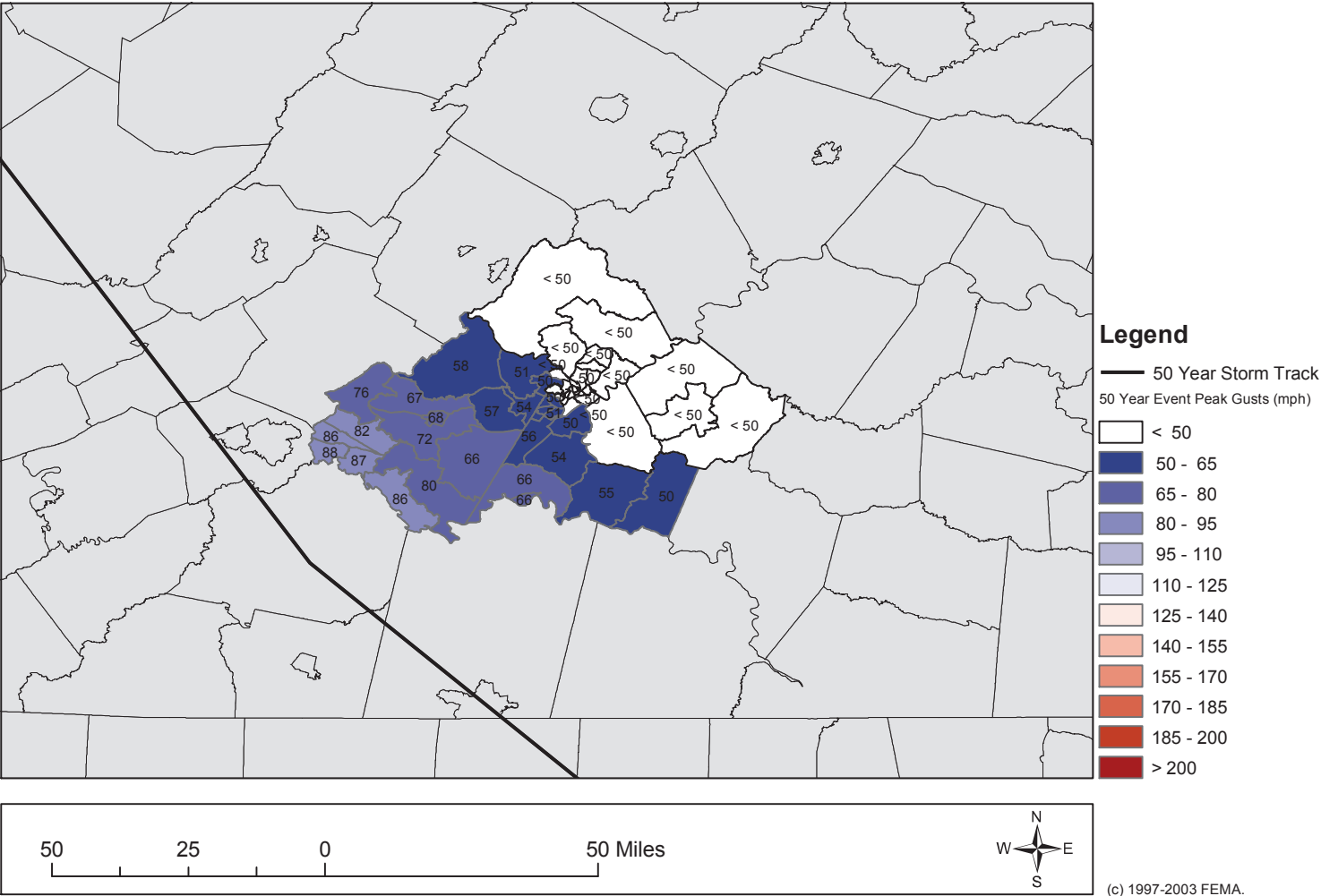
Total Losses Paid:

Sub. Damage Claims Since 1978:

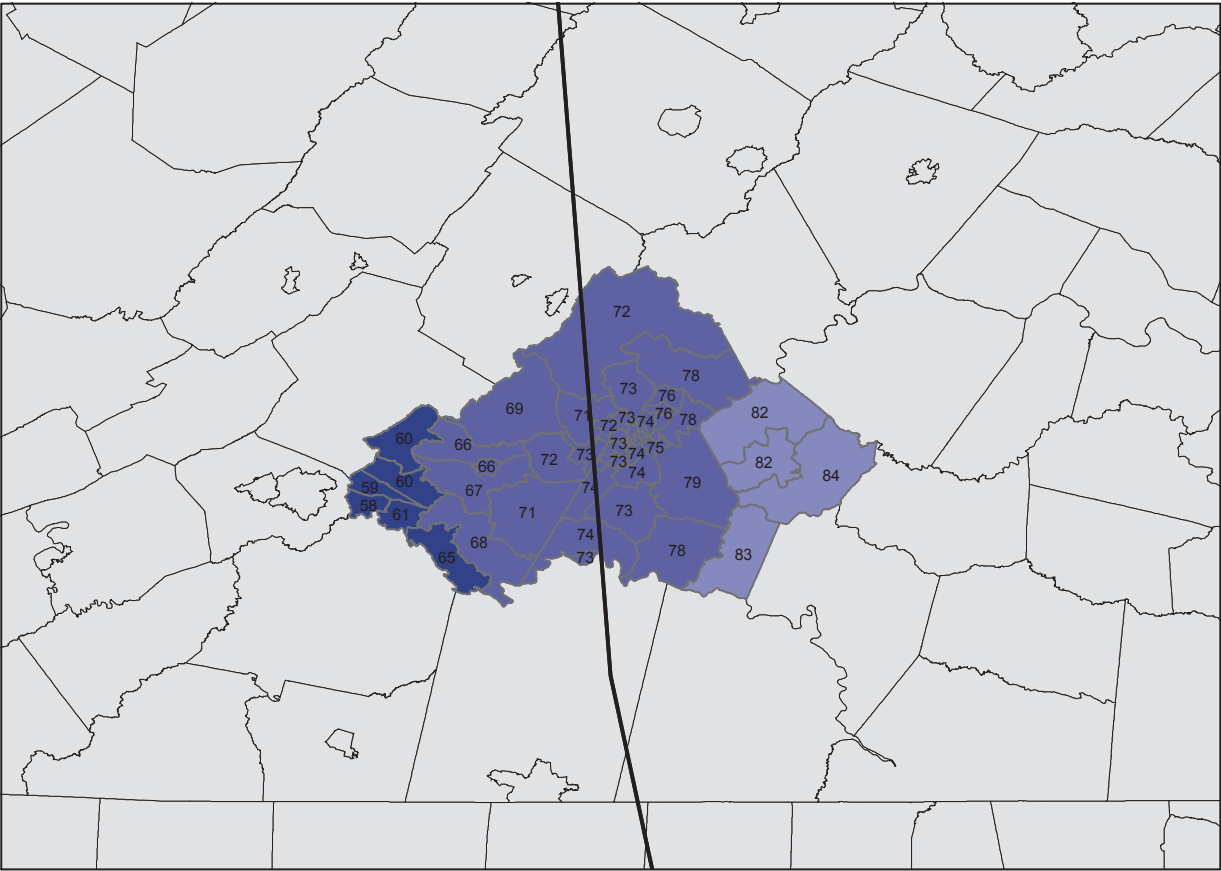
☐ Tribal
Community Website:☐ Upton Jones Claims☐ HMGP Projects☐ ICC Claims☐ FMA Projects[FAMS](#)[Log Out](#)

Appendix 5.4
HAZUS-MH Wind
Speed Maps

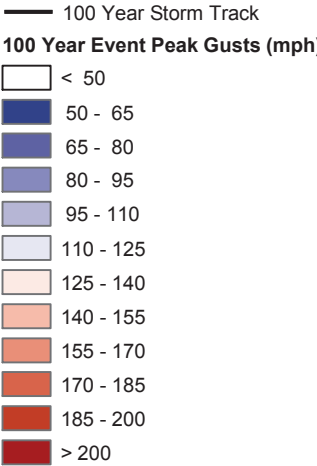
Region 2000
Probabilistic 50 Year Hurricane Event



Region 2000
Probabilistic 100 Year Hurricane Event



Legend



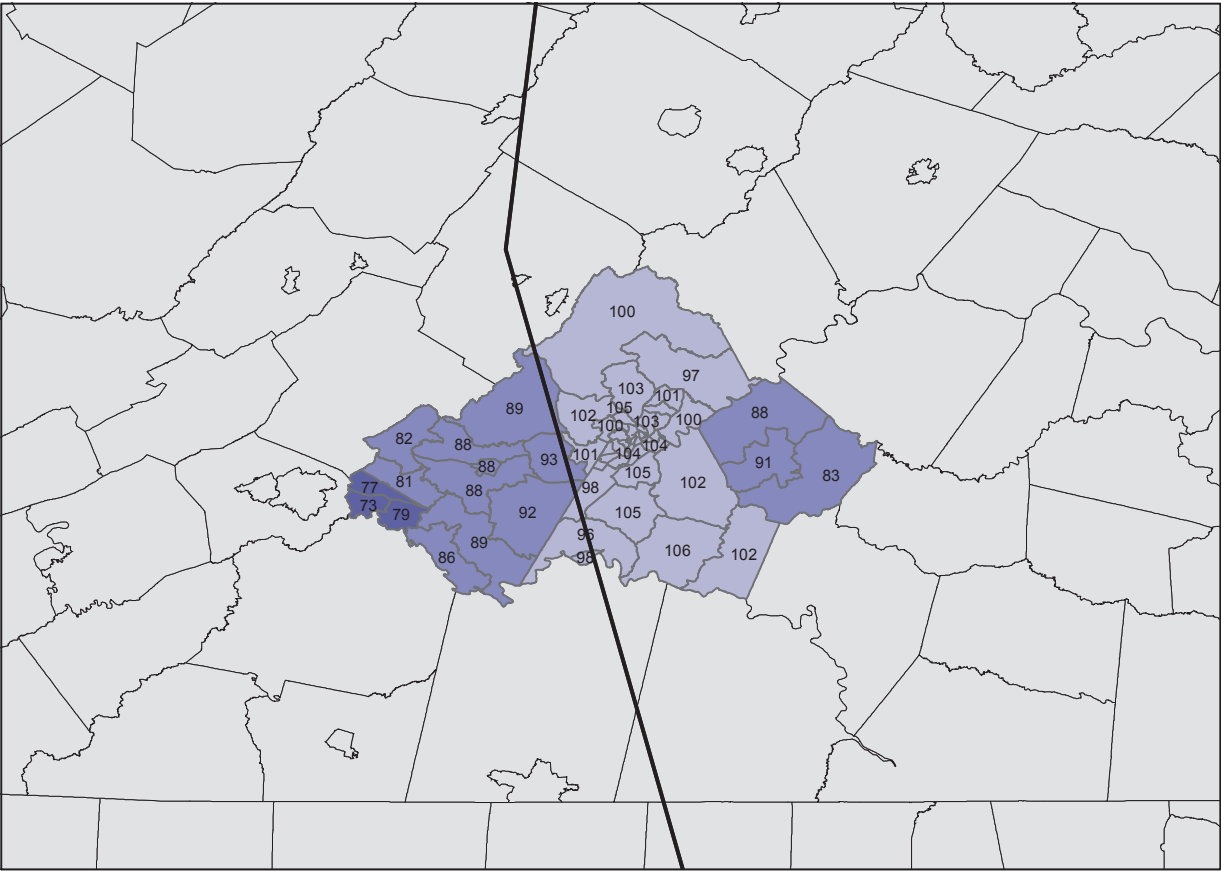
40 20 0 40 Miles



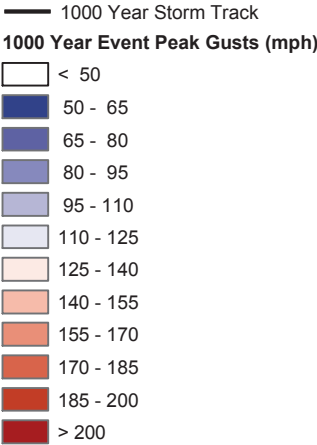
(c) 1997-2003 FEMA.

Region 2000

Probabilistic 1000 Year Hurricane Event



Legend



40 20 0 40 Miles



(c) 1997-2003 FEMA.

Appendix 5.5

Completed HIRA

Worksheets



Hazard Identification and Risk Assessment

Hazard Index Ranking					
Impact →	Frequency of Occurrence ↓	Catastrophic	Critical	Limited	Negligible
		Highly Likely	5 (Highest)	4 (High)	4 (High)
Likely		5 (Highest)	4 (High)	3 (Medium)	2 (Low)
Possible		4 (High)	3 (Medium)	2 (Low)	2 (Low)
Unlikely		3 (Medium)	2 (Low)	1 (Lowest)	1 (Lowest)
Highly Unlikely		2 (Low)	1 (Lowest)	1 (Lowest)	1 (Lowest)

Source: FEMA, 1997

Frequency of Occurrence	
Highly Likely	Near 100 Percent probability in the next year.
Likely	Between 10 and 100 percent probability in the next year, or at least one chance in the next 10 years.
Possible	Between 1 and 10 percent probability in the next year, or at least one chance in the next 100 years.
Unlikely	Less than 1 percent probability in the next year of less than once chance in the next 100 years.
Highly Unlikely	Little to no probability in next 100 years.

Source: FEMA, 1997

Consequences of Impact	
<i>Catastrophic</i>	Multiple Deaths, complete shutdown of facilities for 30 days or more, more than 50 percent of property is severely damaged.
<i>Critical</i>	Multiple severe injuries, complete shutdown of critical facilities for at least 2 weeks, more than 25 percent of property is severely damaged.
<i>Limited</i>	Some injuries, complete shutdown of critical facilities for more than one week, more than 10 percent of property severely damaged.
<i>Negligible</i>	Minor injuries, minimal quality-of-life impact, shutdown of critical facilities and services for 24 hours or less, less than 10 percent of property is severely damaged.

Source: FEMA, 1997

Region 2000	Wages-Sector (Ac/Skxw)	Hotel (A Bntxw)	Travel	Wkly (A Bntxw) (Tntxw)	Medic	Turkdeent Land, Substanc	Tentam	Turkxw
Amherst County	5	5	5	3	1	1	1	1
Amherst, Town of	5	4	4	1	3	1	1	1
Appomattox County								
Appomattox, Town of								
Pamplin City, Town of								
Bedford City								
Bedford County								
Campbell County								
Altavista, Town of								
Brookneal, Town of								
Lynchburg City								

The HIRA process will determine all the natural hazards that might affect the area. The hazards will be ranked to determine what hazards are most likely to impact the communities of Region 2000. Just like the 2006 HIRA, hazards that are determined to have significant impact (*ranking of 5 or 4*) will be analyzed in the greatest detail to determine the magnitude of future events and the vulnerability for the community and the critical facilities. Hazards that receive a moderate impact ranking (*ranking of 3*) will be analyzed with available data to determine the risk and vulnerability to the specified hazard. The limited impact hazards (*ranking of 2 or 1*) will be briefly addressed in the plan.

1000 styles

Bedford Co. Fire Dept.

Hazard Identification and Risk Assessment



Major Routes (Arrows)
Local (Arrows)
Wild (Arrows/Ticks)
Wildfire
Landscape and Land Use
Topography

Hazard Index Ranking				
Impact	Frequency of Occurrence	Catastrophic	Critical	Limited
Highly Likely	5 (Highest)	4 (High)	4 (High)	3 (Medium)
Likely	5 (Highest)	4 (High)	3 (Medium)	2 (Low)
Possible	4 (High)	3 (Medium)	2 (Low)	2 (Low)
Unlikely	3 (Medium)	2 (Low)	1 (Lowest)	1 (Lowest)
Highly Unlikely	2 (Low)	1 (Lowest)	1 (Lowest)	1 (Lowest)

Source: FEMA, 1997

Region 2000	Major Routes (Arrows)	Local (Arrows)	Wild (Arrows/Ticks)	Wildfire	Landscape and Land Use	Topography
Amherst County						
Amherst, Town of						
Appomattox County						
Appomattox, Town of						
Pamplin City, Town of						
Bedford City						
Bedford County	M	H	H	M	L	L
Campbell County						
Altavista, Town of						
Brookneal, Town of						
Lynchburg City						

Frequency of Occurrence

Highly Likely	Near 100 Percent probability in the next year.
Likely	Between 10 and 100 percent probability in the next year, or at least one chance in the next 10 years.
Possible	Between 1 and 10 percent probability in the next year, or at least one chance in the next 100 years.
Unlikely	Less than 1 percent probability in the next year of less than once chance in the next 100 years.
Highly Unlikely	Little to no probability in next 100 years.

Source: FEMA, 1997

Consequences of Impact

Catastrophic	Multiple Deaths, complete shutdown of facilities for 30 days or more, more than 50 percent of property is severely damaged.
Critical	Multiple severe injuries, complete shutdown of critical facilities for at least 2 weeks, more than 25 percent of property is severely damaged.
Limited	Some injuries, complete shutdown of critical facilities for more than one week, more than 10 percent of property severely damaged.
Negligible	Minor injuries, minimal quality-of-life impact, shutdown of critical facilities and services for 24 hours or less, less than 10 percent of property is severely damaged.

Source: FEMA, 1997

The HIRA process will determine all the natural hazards that might affect the area. The hazards will be ranked to determine what hazards are most likely to impact the communities of Region 2000. Just like the 2006 HIRA, hazards that are determined to have significant impact (ranking of 5 or 4) will be analyzed in the greatest detail to determine the magnitude of future events and the vulnerability for the community and the critical facilities. Hazards that receive a moderate impact ranking (ranking of 3) will be analyzed with available data to determine the risk and vulnerability to the specified hazard. The limited impact hazards (ranking of 2 or 1) will be briefly addressed in the plan.



Hazard Identification and Risk Assessment

Water Storms (Ice/Snow)
Flood (Hurricane)
Drought
Wind (Hurricane/Tornado)
Wildfire
Landslide and Land Subsidence
Terrorism
Earthquake

Region 2000							
Amherst County							
Amherst, Town of							
Appomattox County	5	5	5	4	4	2	1
Appomattox, Town of							
Pamplin City, Town of							
Bedford City							
Bedford County							
Campbell County							
Altavista, Town of							
Brookneal, Town of							
Lynchburg City							

Hazard Index Ranking				
Impact	Frequency of Occurrence	Catastrophic	Critical	Limited
Highly Likely	5 (Highest)	5 (Highest)	4 (High)	4 (High)
Likely	5 (Highest)	5 (Highest)	4 (High)	3 (Medium)
Possible	4 (High)	4 (High)	3 (Medium)	2 (Low)
Unlikely	3 (Medium)	3 (Medium)	2 (Low)	1 (Lowest)
Highly Unlikely	2 (Low)	2 (Low)	1 (Lowest)	1 (Lowest)

Source: FEMA, 1997

The HIRA process will determine all the natural hazards that might affect the area. The hazards will be ranked to determine what hazards are most likely to impact the communities of Region 2000. Just like the 2006 HIRA, hazards that are determined to have significant impact (ranking of 5 or 4) will be analyzed in the greatest detail to determine the magnitude of future events and the vulnerability for the community and the critical facilities. Hazards that receive a moderate impact ranking (ranking of 3) will be analyzed with available data to determine the risk and vulnerability to the specified hazard. The limited impact hazards (ranking of 2 or 1) will be analyzed using the best available data to determine the risk to the community.

Frequency of Occurrence	
Highly Likely	Near 100 Percent probability in the next year.
Likely	Between 10 and 100 percent probability in the next year, or at least one chance in the next 10 years.
Possible	Between 1 and 10 percent probability in the next year, or at least one chance in the next 100 years.
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Highly Unlikely	Little to no probability in next 100 years.

Source: FEMA, 1997

Consequences of Impact	
Catastrophic	Multiple Deaths, complete shutdown of facilities for 30 days or more, more than 50 percent of property is severely damaged.
Critical	Multiple severe injuries, complete shutdown of critical facilities for at least 2 weeks, more than 25 percent of property is severely damaged.
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Negligible	Minor injuries, minimal quality-of-life impact, shutdown of critical facilities and services for 24 hours or less, less than 10 percent of property is severely damaged.

Source: FEMA, 1997

Koxanne taubette
TOWN OF APPOMATTOX



Hazard Identification
and Risk Assessment



White Springs (Lee/Knox)
Hood (Berkman)
Doright
Mabel (Berkman/Torrey)
Weldon
Laurieville/Lake/Sixburg
Tombston
Fayetteville

Region 2000									
Amherst County									
Amherst, Town of									
Appomattox County									
Appomattox, Town of	5	5	5	4	4	2	1	1	
Pamplin City, Town of									
Bedford City									
Bedford County									
Campbell County									
Altavista, Town of									
Brookneal, Town of									
Lynchburg City									

Hazard Index Ranking					
Impact ↑	Frequency of Occurrence ↓	Catastrophic	Critical	Limited	Negligible
Highly Likely		5 (Highest)	4 (High)	4 (High)	3 (Medium)
Likely		5 (Highest)	4 (High)	3 (Medium)	2 (Low)
Possible		4 (High)	3 (Medium)	2 (Low)	2 (Low)
Unlikely		3 (Medium)	2 (Low)	1 (Lowest)	1 (Lowest)
Highly Unlikely		2 (Low)	1 (Lowest)	1 (Lowest)	1 (Lowest)
Source: FEMA, 1997					

The HIRA process will determine all the natural hazards that might affect the area. The hazards will be ranked to determine what hazards are most likely to impact the communities of Region 2000. Just like the 2006 HIRA, hazards that are determined to have significant impact (ranking of 5 or 4) will be analyzed in the greatest detail to determine the magnitude of future events and the vulnerability for the community and the critical facilities. Hazards that receive a moderate impact ranking (ranking of 3) will be analyzed with available data to determine the risk and vulnerability to the specified hazard. The limited impact hazards (ranking of 2 or 1) will be briefly addressed in the plan.

Frequency of Occurrence	
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Likely	Between 10 and 100 percent probability in the next year, or at least one chance in the next 10 years.
Possible	Between 1 and 10 percent probability in the next year, or at least one chance in the next 100 years.
Unlikely	Less than 1 percent probability in the next year of less than once chance in the next 100 years.
Highly Unlikely	Little to no probability in next 100 years.

Source: FEMA, 1997

Consequences of Impact	
Catastrophic	Multiple Deaths, complete shutdown of facilities for 30 days or more, more than 50 percent of property is severely damaged.
Critical	Multiple severe injuries, complete shutdown of critical facilities for at least 2 weeks, more than 25 percent of property is severely damaged.
Limited	Some injuries, complete shutdown of critical facilities for more than one week, more than 10 percent of property severely damaged.
Negligible	Minor injuries, minimal quality-of-life impact, shutdown of critical facilities and services for 24 hours or less, less than 10 percent of property is severely damaged.

Source: FEMA, 1997

Water Storms (Ice Snow)
Flood (Hurricane)
Drought
Wind (Hurricane/Tornado)
Wildfire
Landslide and Land Subsidence
Terrorism
Earthquake

Region 2000							
Amherst County							
Amherst, Town of							
Appomattox County							
Appomattox, Town of							
Pamplin City, Town of							
Bedford City							
Bedford County							
Campbell County	M-H	H	M-H	M-H	Med	Low	Low
Altavista, Town of							
Brookneal, Town of							
Lynchburg City							

Hazard Index Ranking				
Impact Frequency of Occurrence	Catastrophic	Critical	Limited	Negligible
Highly Likely	5 (Highest)	4 (High)	4 (High)	3 (Medium)
Likely	5 (Highest)	4 (High)	3 (Medium)	2 (Low)
Possible	4 (High)	3 (Medium)	2 (Low)	2 (Low)
Unlikely	3 (Medium)	2 (Low)	1 (Lowest)	1 (Lowest)
Highly Unlikely	2 (Low)	1 (Lowest)	1 (Lowest)	1 (Lowest)

Source: FEMA, 1997

The HIRA process will determine all the natural hazards that might affect the area. The hazards will be ranked to determine what hazards are most likely to impact the communities of Region 2000. Just like the 2006 HIRA, hazards that are determined to have significant impact (ranking of 5 or 4) will be analyzed in the greatest detail to determine the magnitude of future events and the vulnerability for the community and the critical facilities. Hazards that receive a moderate impact ranking (ranking of 3) will be analyzed with available data to determine the risk and vulnerability to the specified hazard. The limited impact hazards (ranking of 2 or 1) will be analyzed using the best available data to determine the risk to the community.

Frequency of Occurrence	
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Likely	Between 10 and 100 percent probability in the next year, or at least one chance in the next 10 years.
Possible	Between 1 and 10 percent probability in the next year, or at least one chance in the next 100 years.
Unlikely	Less than 1 percent probability in the next year of less than once chance in the next 100 years.
Highly Unlikely	Little to no probability in next 100 years.

Source: FEMA, 1997

Consequences of Impact	
Catastrophic	Multiple Deaths, complete shutdown of facilities for 30 days or more, more than 50 percent of property is severely damaged.
Critical	Multiple severe injuries, complete shutdown of critical facilities for at least 2 weeks, more than 25 percent of property is severely damaged.
Limited	Some injuries, complete shutdown of critical facilities for more than one week, more than 10 percent of property severely damaged.
Negligible	Minor injuries, minimal quality-of-life impact, shutdown of critical facilities and services for 24 hours or less, less than 10 percent of property is severely damaged.

Source: FEMA, 1997

Hazard Index Ranking					
Impact →	Frequency of Occurrence ↓	Catastrophic	Critical	Limited	Negligible
		Highly Likely	5 (Highest)	4 (High)	4 (High)
Likely		5 (Highest)	4 (High)	3 (Medium)	2 (Low)
Possible		4 (High)	3 (Medium)	2 (Low)	2 (Low)
Unlikely		3 (Medium)	2 (Low)	1 (Lowest)	1 (Lowest)
Highly Unlikely		2 (Low)	1 (Lowest)	1 (Lowest)	1 (Lowest)

Source: FEMA, 1997

	Frequency of Occurrence
<i>Highly Likely</i>	Near 100 Percent probability in the next year.
<i>Likely</i>	Between 10 and 100 percent probability in the next year, or at least one chance in the next 10 years.
<i>Possible</i>	Between 1 and 10 percent probability in the next year, or at least one chance in the next 100 years.
<i>Unlikely</i>	Less than 1 percent probability in the next year or less than once chance in the next 100 years.
<i>Highly Unlikely</i>	Little to no probability in next 100 years.

Source: FEMA, 1997

Consequences of Impact	
<i>Catastrophic</i>	Multiple Deaths, complete shutdown of facilities for 30 days or more, more than 50 percent of property is severely damaged.
<i>Critical</i>	Multiple severe injuries, complete shutdown of critical facilities for at least 2 weeks, more than 25 percent of property is severely damaged.
<i>Limited</i>	Some injuries, complete shutdown of critical facilities for more than one week, more than 10 percent of property severely damaged.
<i>Negligible</i>	Minor injuries, minimal quality-of-life impact, shutdown of critical facilities and services for 24 hours or less, less than 10 percent of property is severely damaged.

Source: FEMA, 1997

[illegible]

The HIRA process will determine all the natural hazards that might affect the area. The hazards will be ranked to determine what hazards are most likely to impact the communities of Region 2000. Just like the 2006 HIRA, hazards that are determined to have significant impact (*ranking of 5 or 4*) will be analyzed in the greatest detail to determine the magnitude of future events and the vulnerability for the community and the critical facilities. Hazards that receive a moderate impact ranking (*ranking of 3*) will be analyzed with available data to determine the risk and vulnerability to the specified hazard. The limited impact hazards (*ranking of 2 or 1*) will be briefly addressed in the plan.

Bill Aljovic



Hazard Identification and Risk Assessment

Hazard Index Ranking				
Impact	Frequency of Occurrence	Catastrophic	Critical	Limited
Highly Likely	5 (Highest)	5 (Highest)	4 (High)	3 (Medium)
Likely	4 (High)	4 (High)	3 (Medium)	2 (Low)
Possible	3 (Medium)	3 (Medium)	2 (Low)	2 (Low)
Unlikely	2 (Low)	2 (Low)	1 (Lowest)	1 (Lowest)
Highly Unlikely	1 (Lowest)	1 (Lowest)	1 (Lowest)	1 (Lowest)

Source: FEMA, 1997

Region 2000	Major Seismic (Dev/Spec)	Local (A/B/C/D/E)	Local (A/B/C/D/E)	Local (A/B/C/D/E)	Local (A/B/C/D/E)	Local (A/B/C/D/E)	Local (A/B/C/D/E)	Local (A/B/C/D/E)	Local (A/B/C/D/E)
Amherst County	4	4	4	4	4	4	4	4	4
Amherst, Town of									
Appomattox County									
Appomattox, Town of									
Pamplin City, Town of									
Bedford City									
Bedford County									
Campbell County									
Altavista, Town of									
Brookneal, Town of									
Lynchburg City	3	3	3	3	3	3	3	3	3

Frequency of Occurrence

Highly Likely	Near 100 Percent probability in the next year.
Likely	Between 10 and 100 percent probability in the next year, or at least one chance in the next 10 years.
Possible	Between 1 and 10 percent probability in the next year, or at least one chance in the next 100 years.
Unlikely	Less than 1 percent probability in the next year of less than once chance in the next 100 years.
Highly Unlikely	Little to no probability in next 100 years.

Source: FEMA, 1997

Consequences of Impact

Catastrophic	Multiple Deaths, complete shutdown of facilities for 30 days or more, more than 50 percent of property is severely damaged.
Critical	Multiple severe injuries, complete shutdown of critical facilities for at least 2 weeks, more than 25 percent of property is severely damaged.
Limited	Some injuries, complete shutdown of critical facilities for more than one week, more than 10 percent of property severely damaged.
Negligible	Minor injuries, minimal quality-of-life impact, shutdown of critical facilities and services for 24 hours or less, less than 10 percent of property is severely damaged.

Source: FEMA, 1997

The HIRA process will determine all the natural hazards that might affect the area. The hazards will be ranked to determine what hazards are most likely to impact the communities of Region 2000. Just like the 2006 HIRA, hazards that are determined to have significant impact (ranking of 5 or 4) will be analyzed in the greatest detail to determine the magnitude of future events and the vulnerability for the community and the critical facilities. Hazards that receive a moderate impact ranking (ranking of 3) will be analyzed with available data to determine the risk and vulnerability to the specified hazard. The limited impact hazards (ranking of 2 or 1) will be briefly addressed in the plan.



Hazard Identification and Risk Assessment

Hazard Index Ranking				
Impact Frequency of Occurrence	Catastrophic	Critical	Limited	Negligible
Highly Likely	5 (Highest)	4 (High)	4 (High)	3 (Medium)
Likely	5 (Highest)	4 (High)	3 (Medium)	2 (Low)
Possible	4 (High)	3 (Medium)	2 (Low)	2 (Low)
Unlikely	3 (Medium)	2 (Low)	1 (Lowest)	1 (Lowest)
Highly Unlikely	2 (Low)	1 (Lowest)	1 (Lowest)	1 (Lowest)

Source: FEMA, 1997

Region 2000	Wokee (Dec/Sep)	Wood (Spring)	Wood (Summer/Summer)	Wokee	Wood (Summer)	Wood (Summer)
Amherst County						
Amherst, Town of						
Appomattox County						
Appomattox, Town of						
Pamplin City, Town of						
Bedford City						
Bedford County						
Campbell County						
Altavista, Town of						
Brookneal, Town of						
Lynchburg City						

Frequency of Occurrence

Highly Likely	Near 100 Percent probability in the next year.
Likely	Between 10 and 100 percent probability in the next year, or at least one chance in the next 10 years.
Possible	Between 1 and 10 percent probability in the next year, or at least one chance in the next 100 years.
Unlikely	Less than 1 percent probability in the next year of less than once chance in the next 100 years.
Highly Unlikely	Little to no probability in next 100 years.

Source: FEMA, 1997

The HIRA process will determine all the natural hazards that might affect the area. The hazards will be ranked to determine what hazards are most likely to impact the communities of Region 2000. Just like the 2006 HIRA, hazards that are determined to have significant impact (ranking of 5 or 4) will be analyzed in the greatest detail to determine the magnitude of future events and the vulnerability for the community and the critical facilities. Hazards that receive a moderate impact ranking (ranking of 3) will be analyzed with available data to determine the risk and vulnerability to the specified hazard. The limited impact hazards (ranking of 2 or 1) will be briefly addressed in the plan.

Consequences of Impact

Catastrophic	Multiple Deaths, complete shutdown of facilities for 30 days or more, more than 50 percent of property is severely damaged.
Critical	Multiple severe injuries, complete shutdown of critical facilities for at least 2 weeks, more than 25 percent of property is severely damaged.
Limited	Some injuries, complete shutdown of critical facilities for more than one week, more than 10 percent of property severely damaged.
Negligible	Minor injuries, minimal quality-of-life impact, shutdown of critical facilities and services for 24 hours or less, less than 10 percent of property is severely damaged.

Source: FEMA, 1997

Appendix 5.6

Hurricane Table

Category	Winds (1 min sustained winds in mph, kt, and km/hr)	Summary	People, Livestock, and Pets	Mobile Homes	Frame Homes	Apartments, Shopping Centers, and Industrial Buildings	High-Rise Windows and Glass	Signage, Fences, and Canopies	Trees	Power and Water	Example
1	74-95 mph 64-82 kt 119-153 km/hr	<i>Very dangerous winds will produce some damage</i>	People, livestock, and pets struck by flying or falling debris could be injured or killed.	Older (mainly pre-1994 construction) mobile homes could be destroyed, especially if they are not anchored properly as they tend to shift or roll off their foundations. Newer mobile homes that are anchored properly can sustain damage involving the removal of shingle or metal roof coverings, and loss of vinyl siding, as well as damage to carports, sunrooms, or lanais.	Some poorly constructed frame homes can experience major damage, involving loss of the roof covering and damage to gable ends as well as the removal of porch coverings and awnings. Unprotected windows may break if struck by flying debris. Masonry chimneys can be toppled. Well-constructed frame homes could have damage to roof shingles, vinyl siding, soffit panels, and gutters. Failure of aluminum, screened-in, swimming pool enclosures can occur.	Some apartment building and shopping center roof coverings could be partially removed. Industrial buildings can lose roofing and siding especially from windward corners, rakes, and eaves. Failures to overhead doors and unprotected windows will be common.	Windows in high-rise buildings can be broken by flying debris. Falling and broken glass will pose a significant danger even after the storm.	There will be occasional damage to commercial signage, fences, and canopies.	Large branches of trees will snap and shallow rooted trees can be toppled.	Extensive damage to power lines and poles will likely result in power outages that could last a few to several days.	Hurricane Dolly (2008) is an example of a hurricane that brought Category 1 winds and impacts to South Padre Island, Texas.

Category	Winds (1 min sustained winds in mph, kt, and km/hr)	Summary	People, Livestock, and Pets	Mobile Homes	Frame Homes	Apartments, Shopping Centers, and Industrial Buildings	High-Rise Windows and Glass	Signage, Fences, and Canopies	Trees	Power and Water	Example
2	96-110 mph 83-95 kt 154-177 km/hr	<i>Extremely dangerous winds will cause extensive damage</i>	There is a substantial risk of injury or death to people, livestock, and pets due to flying and falling debris.	Older (mainly pre-1994 construction) mobile homes have a very high chance of being destroyed and the flying debris generated can shred nearby mobile homes. Newer mobile homes can also be destroyed.	Poorly constructed frame homes have a high chance of having their roof structures removed especially if they are not anchored properly. Unprotected windows will have a high probability of being broken by flying debris. Well-constructed frame homes could sustain major roof and siding damage. Failure of aluminum, screened-in, swimming pool enclosures will be common.	There will be a substantial percentage of roof and siding damage to apartment buildings and industrial buildings. Unreinforced masonry walls can collapse.	Windows in high- rise buildings can be broken by flying debris. Falling and broken glass will pose a significant danger even after the storm.	Commercial signage, fences, and canopies will be damaged and often destroyed.	Many shallowly rooted trees will be snapped or uprooted and block numerous roads.	Near-total power loss is expected with outages that could last from several days to weeks. Potable water could become scarce as filtration systems begin to fail.	Hurricane Frances (2004) is an example of a hurricane that brought Category 2 winds and impacts to coastal portions of Port St. Lucie, Florida with Category 1 conditions experienced elsewhere in the city.

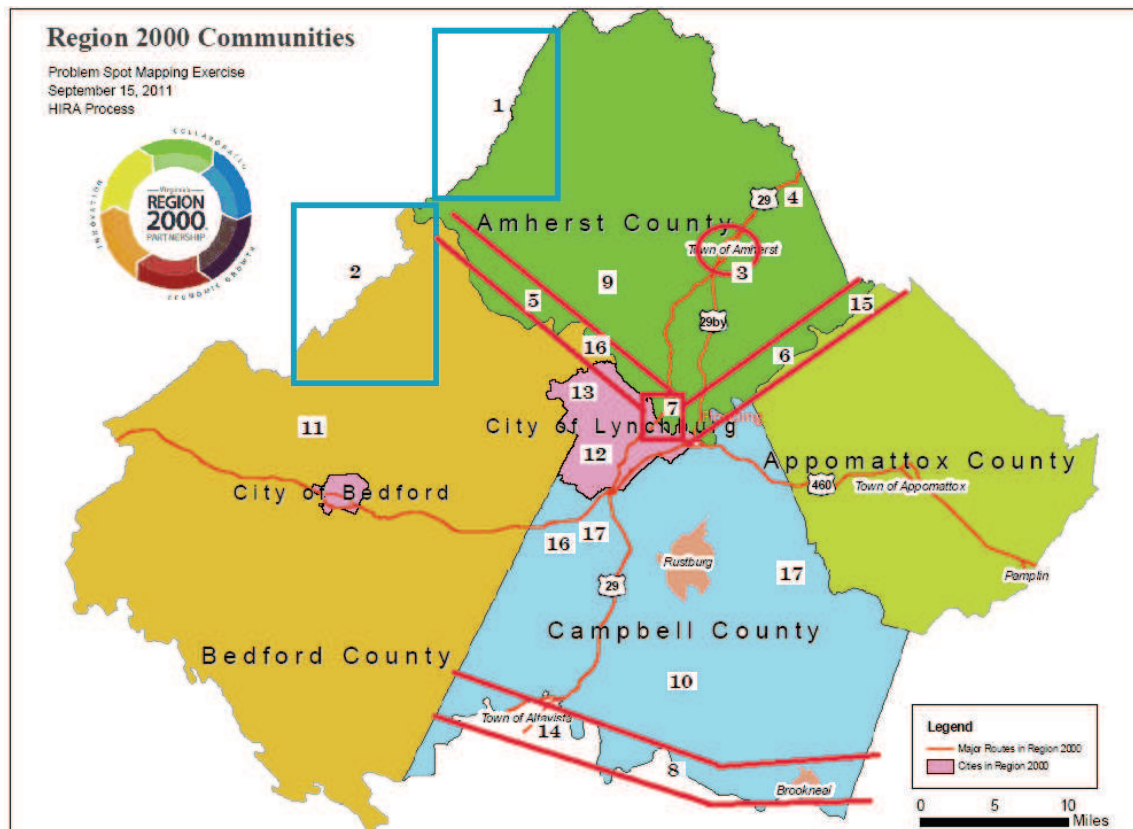
Category	Winds (1 min sustained winds in mph, kt, and km/hr)	Summary	People, Livestock, and Pets	Mobile Homes	Frame Homes	Apartments, Shopping Centers, and Industrial Buildings	High-Rise Windows and Glass	Signage, Fences, and Canopies	Trees	Power and Water	Example
3	111-130 mph 96-113 kt 178-209 km/hr	<i>Devastating damage will occur</i>	There is a high risk of injury or death to people, livestock, and pets due to flying and falling debris.	Nearly all older (pre- 1994) mobile homes will be destroyed. Most newer mobile homes will sustain severe damage with potential for complete roof failure and wall collapse.	Poorly constructed frame homes can be destroyed by the removal of the roof and exterior walls. Unprotected windows will be broken by flying debris. Well-built frame homes can experience major damage involving the removal of roof decking and gable ends.	There will be a high percentage of roof covering and siding damage to apartment buildings and industrial buildings. Isolated structural damage to wood or steel framing can occur. Complete failure of older metal buildings is possible, and older unreinforced masonry buildings can collapse.	Numerous windows will be blown out of high-rise buildings resulting in falling glass, which will pose a threat for days to weeks after the storm.	Most commercial signage, fences, and canopies will be destroyed.	Many trees will be snapped or uprooted, blocking numerous roads.	Electricity and water will be unavailable for several days to a few weeks after the storm passes.	Hurricane Ivan (2004) is an example of a hurricane that brought Category 3 winds and impacts to coastal portions of Gulf Shores, Alabama with Category 2 conditions experienced elsewhere in this city.

Category	Winds (1 min sustained winds in mph, kt, and km/hr)	Summary	People, Livestock, and Pets	Mobile Homes	Frame Homes	Apartments, Shopping Centers, and Industrial Buildings	High-Rise Windows and Glass	Signage, Fences, and Canopies	Trees	Power and Water	Example
4	131-155 mph 114-135 kt 210-249 km/hr	<i>Catastrophic damage will occur</i>	There is a very high risk of injury or death to people, livestock, and pets due to flying and falling debris.	Nearly all older (pre- 1994) mobile homes will be destroyed. A high percentage of newer mobile homes also will be destroyed.	Poorly constructed homes can sustain complete collapse of all walls as well as the loss of the roof structure. Well- built homes also can sustain severe damage with loss of most of the roof structure and/or some exterior walls. Extensive damage to roof coverings, windows, and doors will occur. Large amounts of windborne debris will be lofted into the air. Windborne debris damage will break most unprotected windows and penetrate some protected windows.	There will be a high percentage of structural damage to the top floors of apartment buildings. Steel frames in older industrial buildings can collapse. There will be a high percentage of collapse to older unreinforced masonry buildings.	Most windows will be blown out of high-rise buildings resulting in falling glass, which will pose a threat for days to weeks after the storm.	Nearly all commercial signage, fences, and canopies will be destroyed.	Most trees will be snapped or uprooted and power poles downed. Fallen trees and power poles will isolate residential areas.	Power outages will last for weeks to possibly months. Long- term water shortages will increase human suffering. Most of the area will be uninhabitable for weeks or months.	Hurricane Charley (2004) is an example of a hurricane that brought Category 4 winds and impacts to coastal portions of Punta Gorda, Florida with Category 3 conditions experienced elsewhere in the city.

Category	Winds (1 min sustained winds in mph, kt, and km/hr)	Summary	People, Livestock, and Pets	Mobile Homes	Frame Homes	Apartments, Shopping Centers, and Industrial Buildings	High-Rise Windows and Glass	Signage, Fences, and Canopies	Trees	Power and Water	Example
5	> 155 mph > 135 kt > 249 km/hr	<i>Catastrophic damage will occur</i>	People, livestock, and pets are at very high risk of injury or death from flying or falling debris, even if indoors in mobile homes or framed homes.	Almost complete destruction of all mobile homes will occur, regardless of age or construction.	A high percentage of frame homes will be destroyed, with total roof failure and wall collapse. Extensive damage to roof covers, windows, and doors will occur. Large amounts of windborne debris will be lofted into the air. Windborne debris damage will occur to nearly all unprotected windows and many protected windows.	Significant damage to wood roof commercial buildings will occur due to loss of roof sheathing. Complete collapse of many older metal buildings can occur. Most unreinforced masonry walls will fail which can lead to the collapse of the buildings. A high percentage of industrial buildings and low-rise apartment buildings will be destroyed.	Nearly all windows will be blown out of high-rise buildings resulting in falling glass, which will pose a threat for days to weeks after the storm.	Nearly all commercial signage, fences, and canopies will be destroyed.	Nearly all trees will be snapped or uprooted and power poles downed. Fallen trees and power poles will isolate residential areas.	Power outages will last for weeks to possibly months. Long-term water shortages will increase human suffering. Most of the area will be uninhabitable for weeks or months.	Hurricane Andrew (1992) is an example of a hurricane that brought Category 5 winds and impacts to coastal portions of Cutler Ridge, Florida with Category 4 conditions experienced elsewhere in south Miami-Dade County.

Appendix 5.7

Problem spot mapping exercise



Problem Spot ID	Type of Hazard	Jurisdiction	Description
1	Winter Storm	Amherst County	Lots of black ice on route 130
2	Winter Storm	Bedford County	Houses damaged near Lake and Whitfield Drives
3	Flooding	Town of Amherst	East west road connection (Route 659) gets flooded during heavy rain storms
4	Flooding	Amherst County	Hurricane Camille Caused severe flooding on the Piney, Pedlar and Buffalo Rivers
5	Flooding	Amherst County	Parts of U.S. 60 closed
6	Flooding	Appomattox County	County Road 608 gets flooded
7	Winter Storm	Lynchburg City	6th Street at Church Street closed; 7th Street at Church Street closed; 7th Street at Polk Street closed; 11th Street at Church Street closed; 11th Street at Madison Street closed; 11th Street at Harrison Street closed; 14th Street at Taylor Street closed
8	Flooding	Town of Altavista	Severe flooding of Lynch Creek caused damage at Shreve Park, YMCA, and two feet of mud was deposited on town streets
9	Flooding	Campbell County	Approximately 5 structures are in the mapped FEMA Floodplain, and an additional 5 structures are in close proximity to the Floodplain boundaries
10	Flooding	Campbell County	The historic Marysville Covered Bridge was destroyed by a flood
11	Winter Storm	Bedford County	Steep slopes combined with winter storms cause treacherous road conditions
12	Winter Storm	Lynchburg City	Steep slopes combined with winter storms cause treacherous road conditions
13	Lightning storms	Lynchburg City	Trees in road during thunder storm on Boonsboro Road
14	Flooding	Town of Brookneal	Water runs over road when flooding occurs.
15	Flooding	Amherst County	Flooding along James River during heavy rain.
16	Flooding	Campbell County	Timber Lake Dam failed, causing catastrophic flooding of Buffalo Creek
17	Flooding	Campbell County	On U.S. 460, a rescue worker was killed as he attempted to rescue people in stranded cars on the Buffalo Creek bridge, where the water reached five feet over the road surface.

Problem Spot ID	Type of Hazard	Jurisdiction	Description
1	Winter Storm	Amherst County	Lots of black ice on route 130
2	Winter Storm	Bedford County	Houses damaged near Lake and Whitfield Drives
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4	Flooding	Amherst County	Hurricane Camille Caused severe flooding on the Piney, Pedlar and Buffalo Rivers
5	Flooding	Amherst County	Parts of U.S. 60 closed
6	Flooding	Appomattox County	County Road 608 gets flooded

Problem Spot ID	Type of Hazard	Jurisdiction	Description
7	Winter Storm	Lynchburg City	6th Street at Church Street closed; 7th Street at Church Street closed; 7th Street at Polk Street closed; 11th Street at Church Street closed; 11th Street at Madison Street closed; 11th Street at Harrison Street closed; 14th Street at Taylor Street closed
8	Flooding	Town of Altavista	Severe flooding of Lynch Creek caused damage at Shreve Park, YMCA, and two feet of mud was deposited on town streets
9	Flooding	Campbell County	Approximately 5 structures are in the mapped FEMA Floodplain, and an additional 5 structures are in close proximity to the Floodplain boundaries

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14	Flooding	Town of Brookneal	Water runs over road when flooding occurs.
15	Flooding	Amherst County	Flooding along James River during heavy rain.
16	Flooding	Campbell County	Timber Lake Dam failed, causing catastrophic flooding of Buffalo Creek

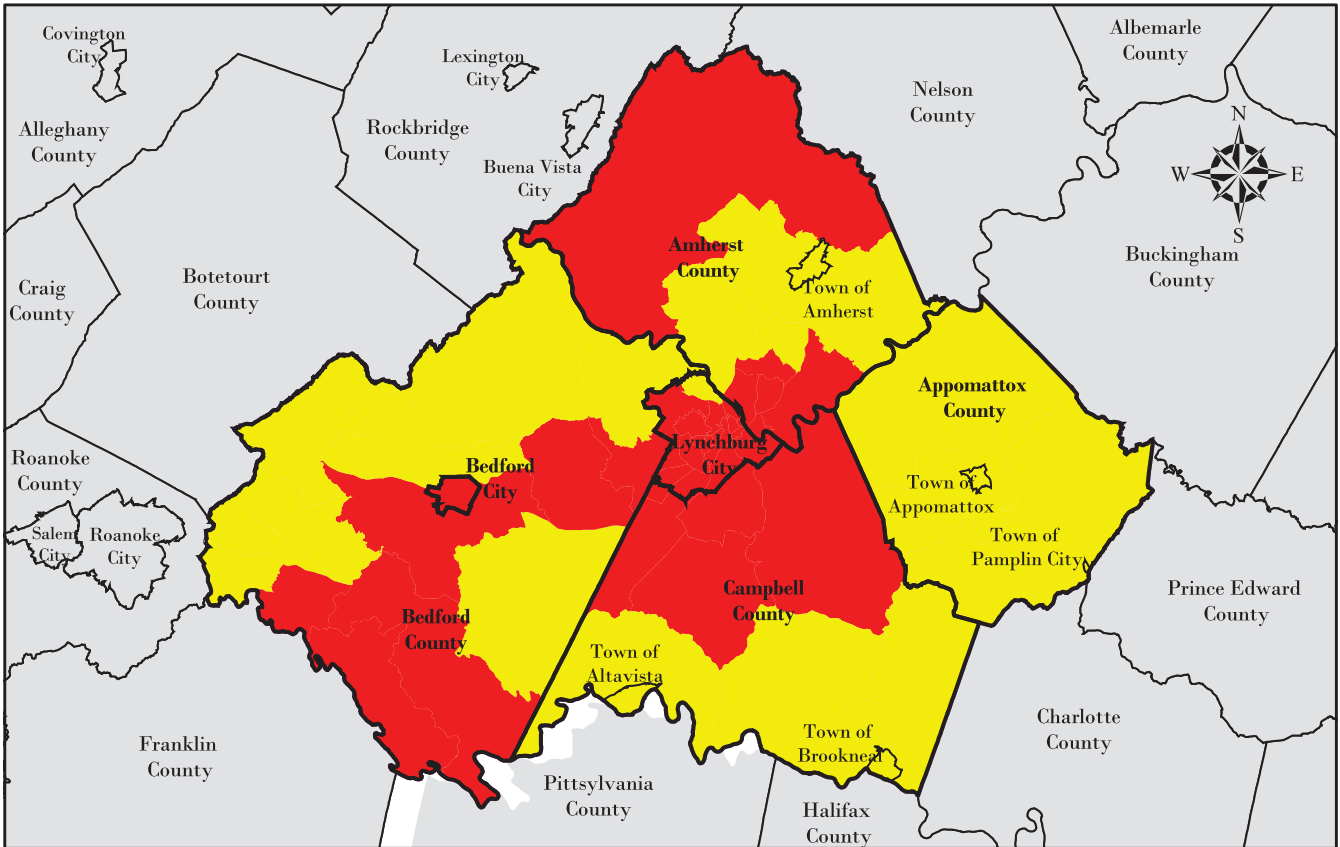
Problem Spot ID	Type of Hazard	Jurisdiction	Description
17	Flooding	Campbell County	On U.S. 460, a rescue worker was killed as he attempted to rescue people in stranded cars on the Buffalo Creek bridge, where the water reached five feet over the road surface.

Appendix 5.8

Relative Ice Potential

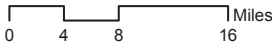
Maps

Region 2000 - Relative Ice Potential



Ice Potential by Census Block

- Medium Potential
- High Potential

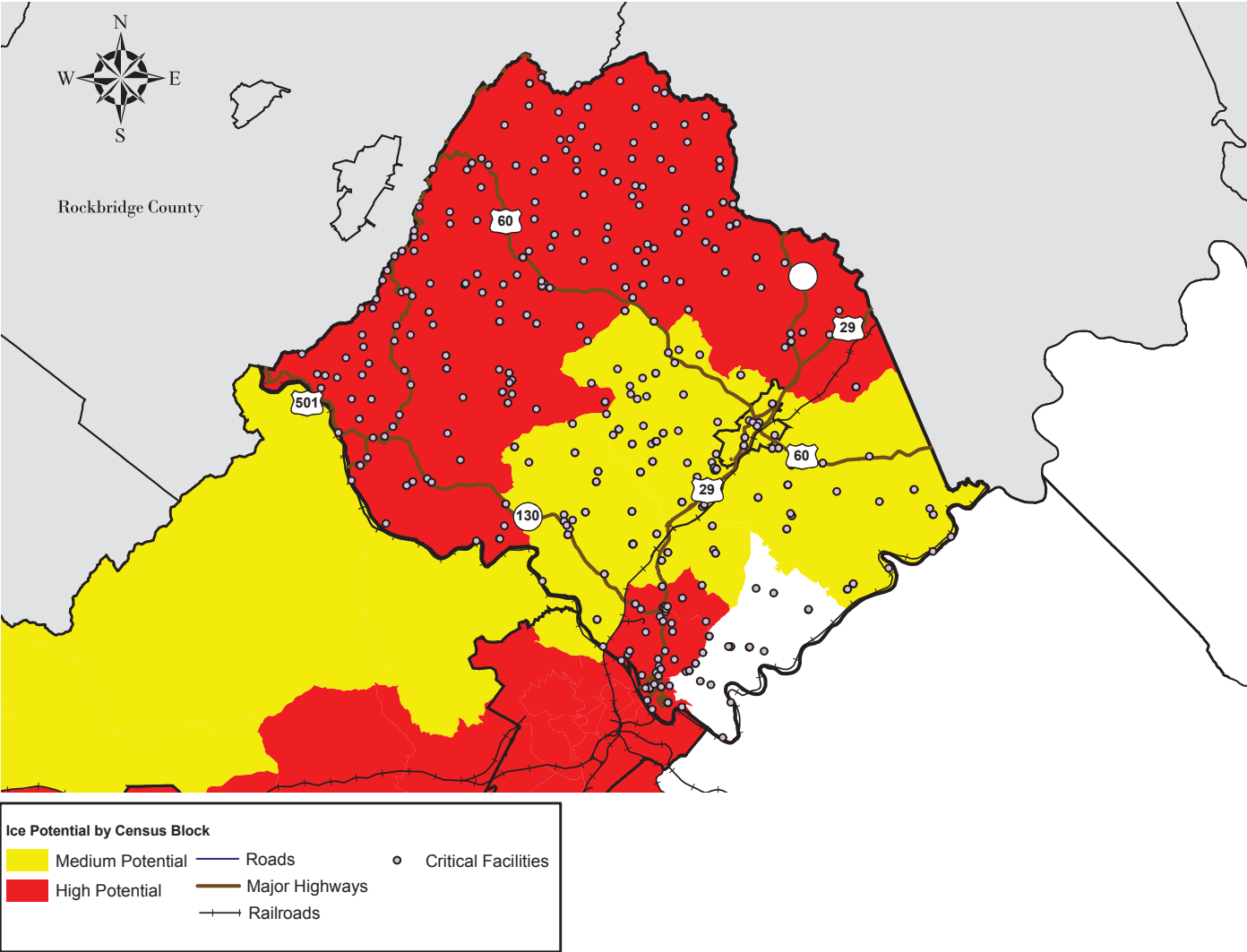


Map prepared by Virginia Tech
Center for Geospatial Information Technology

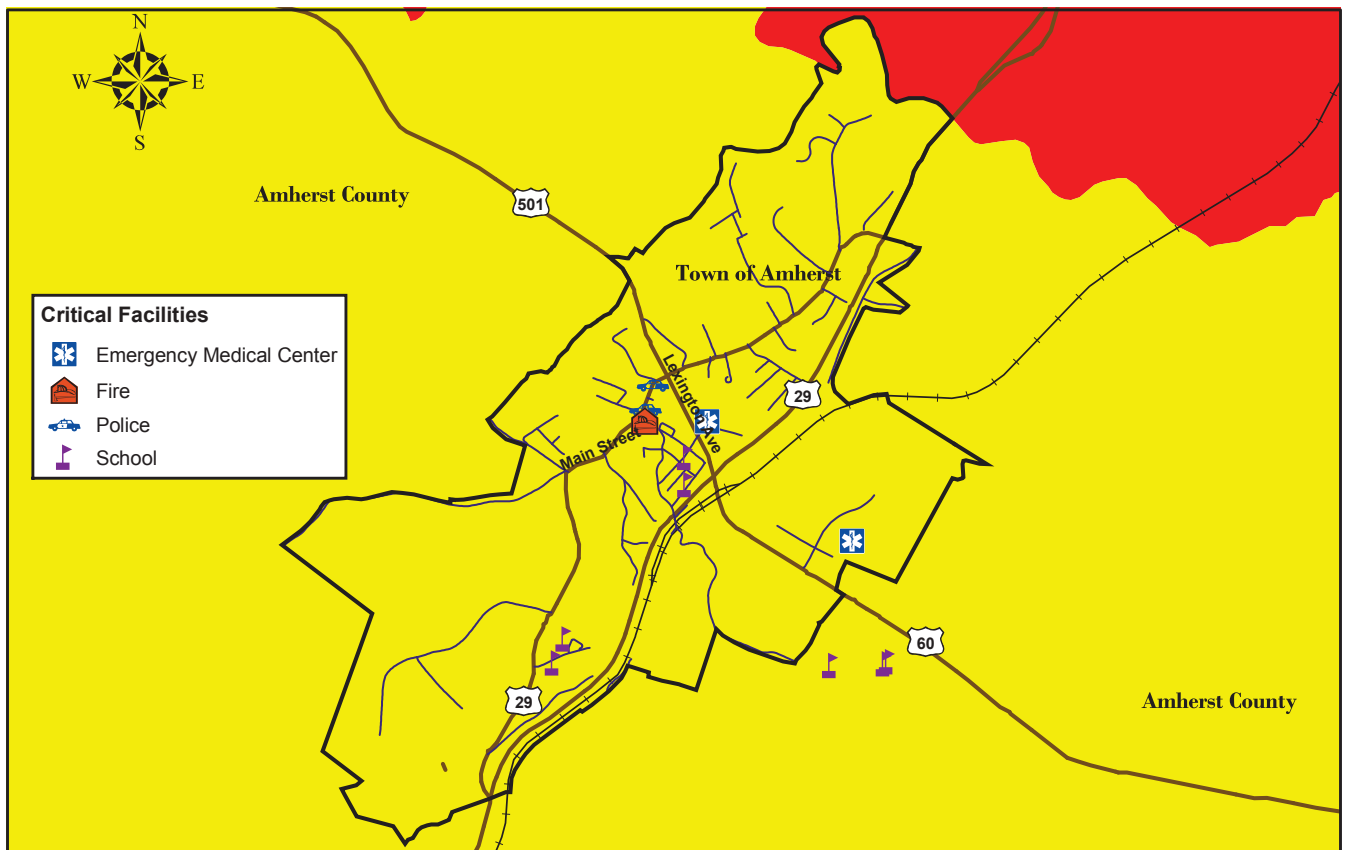
Date: Best available data from 2005

Data Sources: VT CGIT, Region 2000, ESRI,
VirginiaView PRISM

Amherst County - Relative Ice Potential



Town of Amherst - Relative Ice Potential



Ice Potential by Census Block



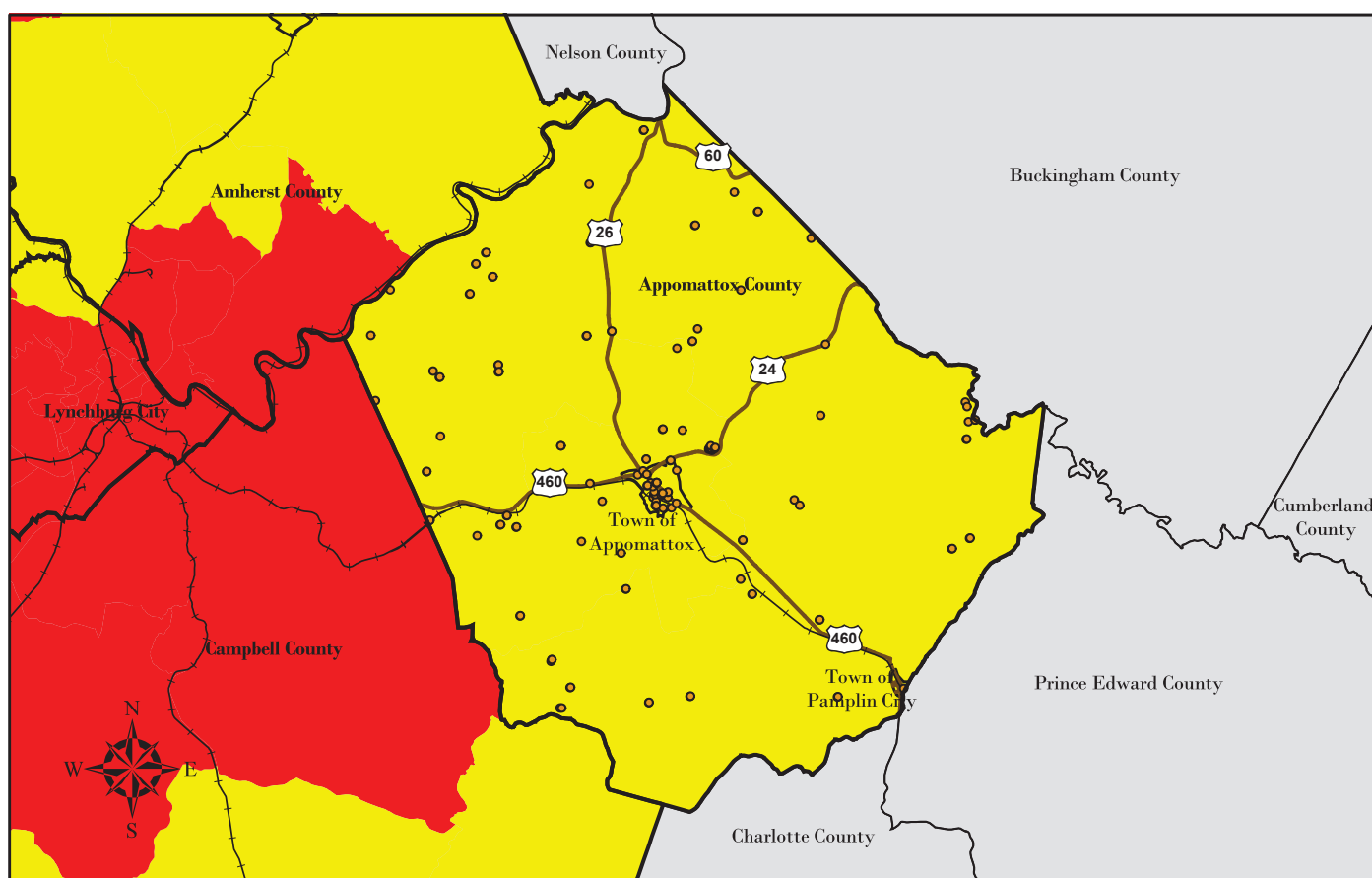
Map prepared by Virginia Tech
Center for Geospatial Information Technology

Date: September 2005

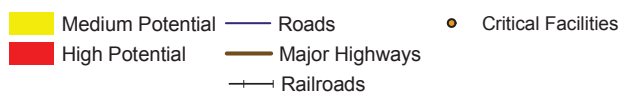
0 0.125 0.25 0.5 Miles

Data Sources: VT CGIT, ESRI, Region 2000, VDOT, VirginiaView

Appomattox County - Relative IcePotential



Ice Potential by Census Block



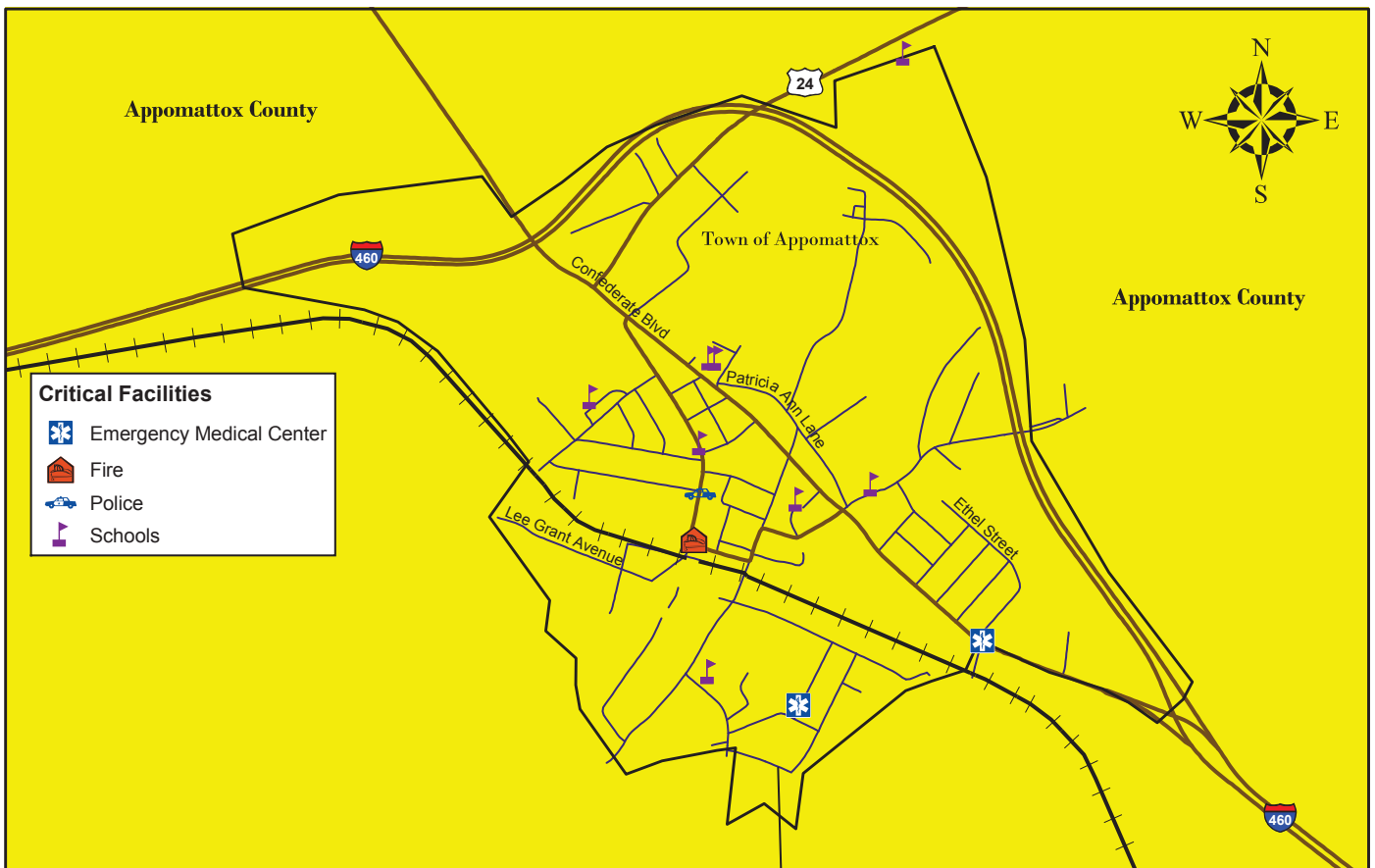
Map prepared by Virginia Tech
Center for Geospatial Information Technology

Date: September 2005

Data Sources: VT CGIT, ESRI, Region 2000, VDOT, VirginiaView

0 1.25 2.5 5 Miles

Town of Appomattox - Relative Ice Potential



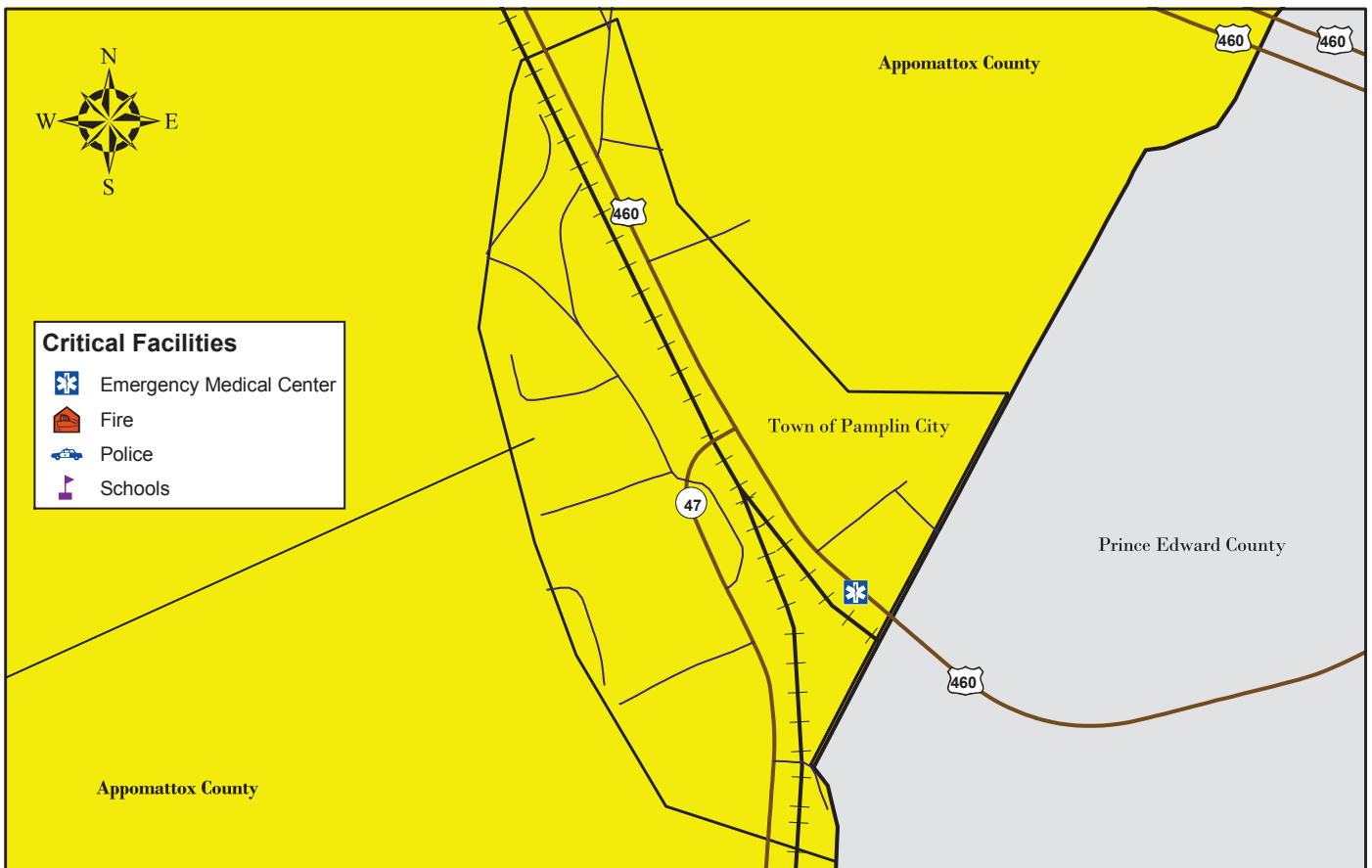
Map prepared by Virginia Tech
Center for Geospatial Information Technology

Date: September 2005

0 0.1 0.2 0.4 Miles

Data Sources: VT CGIT, ESRI, Region 2000, VDOT, VirginiaView

Town of Pamplin- Relative Ice Potential



Ice Potential by Census Block

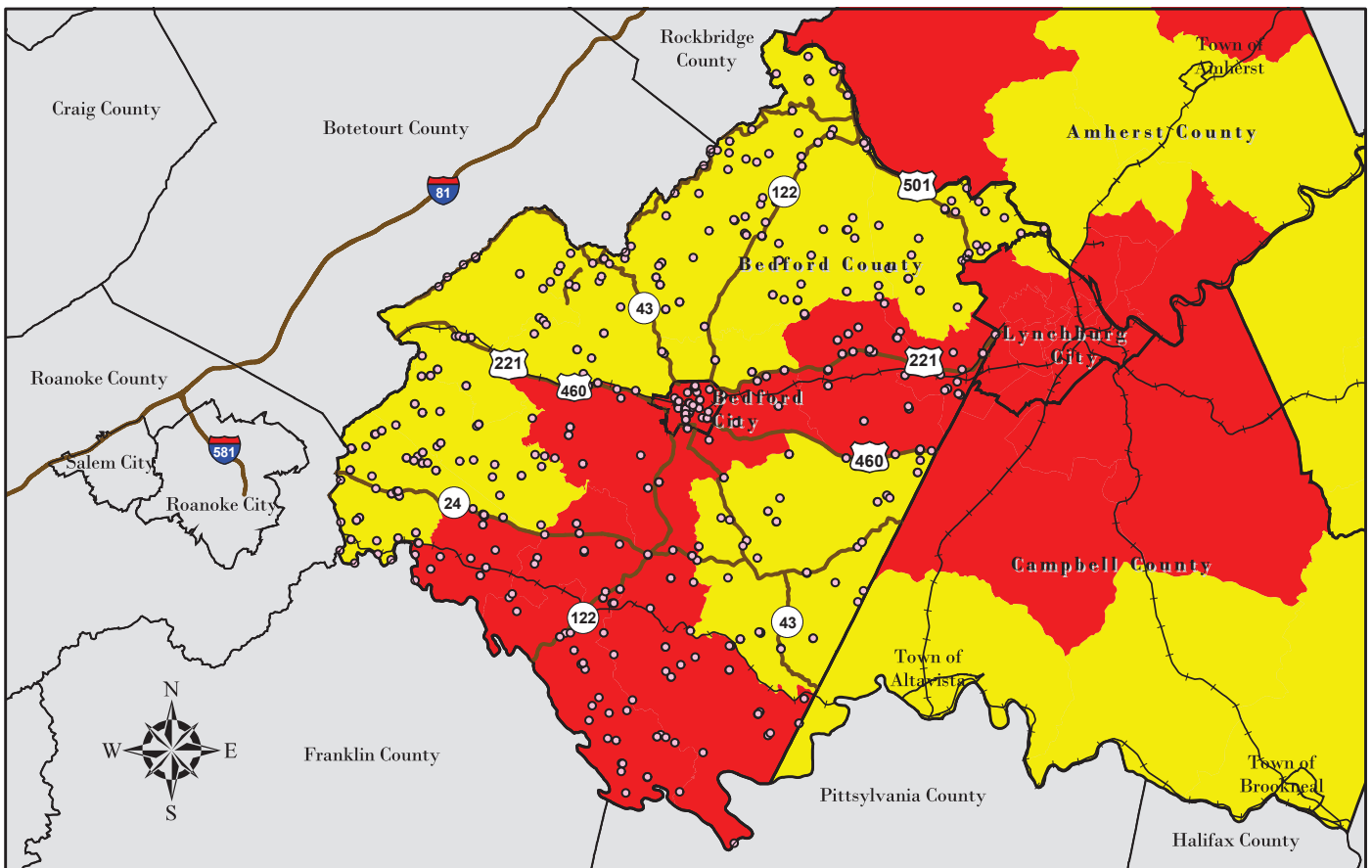
- Medium Potential
- High Potential
- Roads
- Major Highways
- Railroads

Map prepared by Virginia Tech
Center for Geospatial Information Technology

Date: September 2005 0 0.04 0.08 0.16 Miles

Data Sources: VT CGIT, ESRI, Region 2000, VDOT, VirginiaView

Bedford County - Relative Ice Potential



Ice Potential by Census Block

- | | | |
|---|--|--|
| Medium Potential | Roads | Critical Facilities |
| High Potential | Major Highways | Railroads |

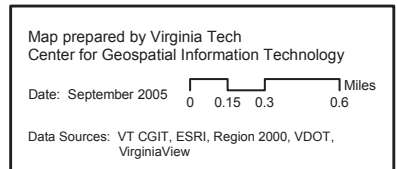
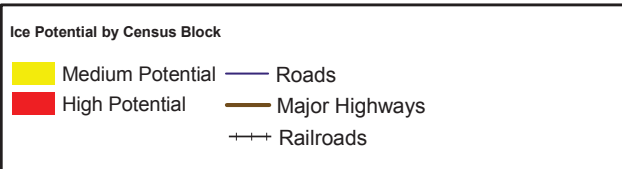
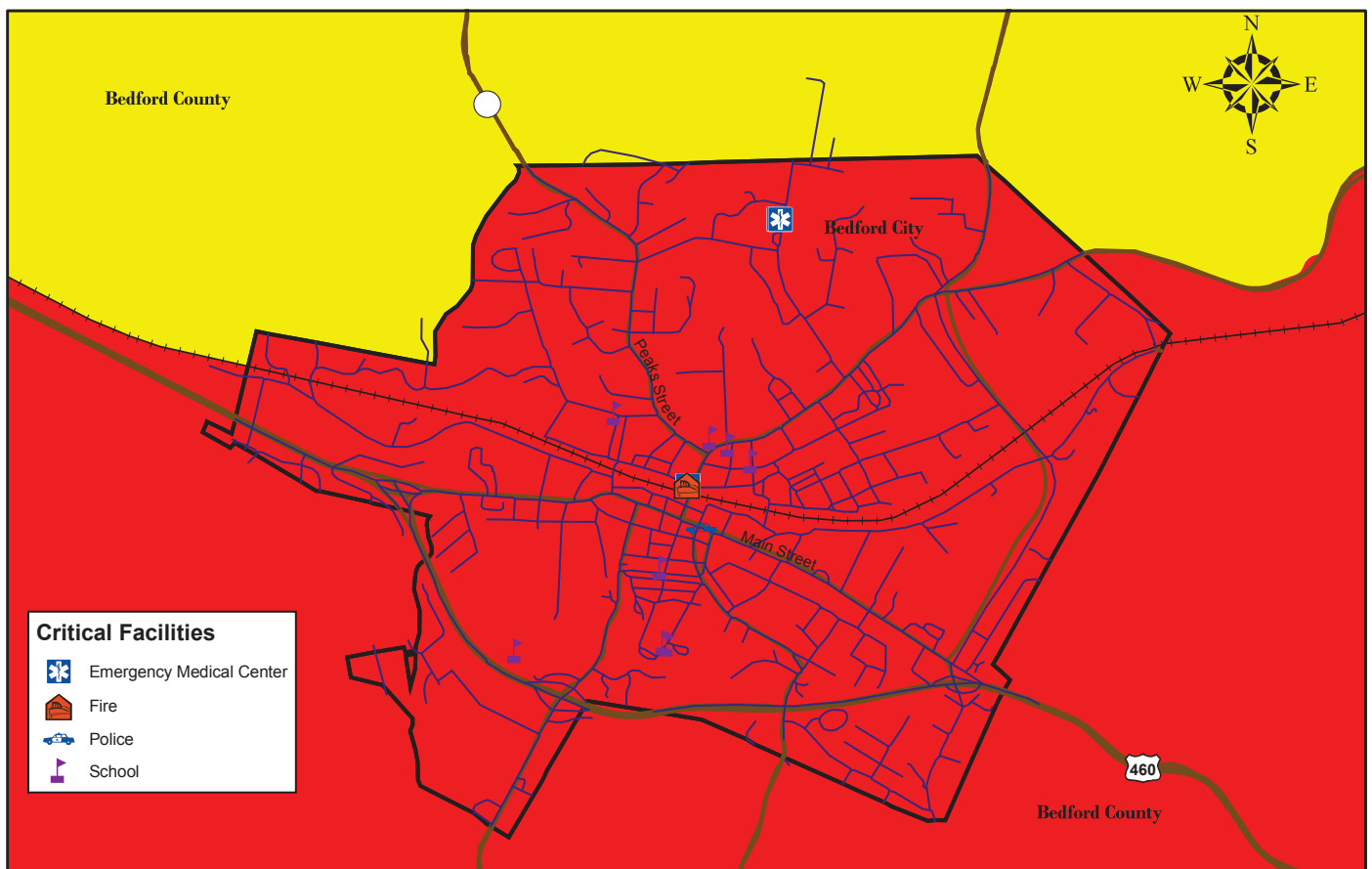
Map prepared by Virginia Tech
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Date: September 2005

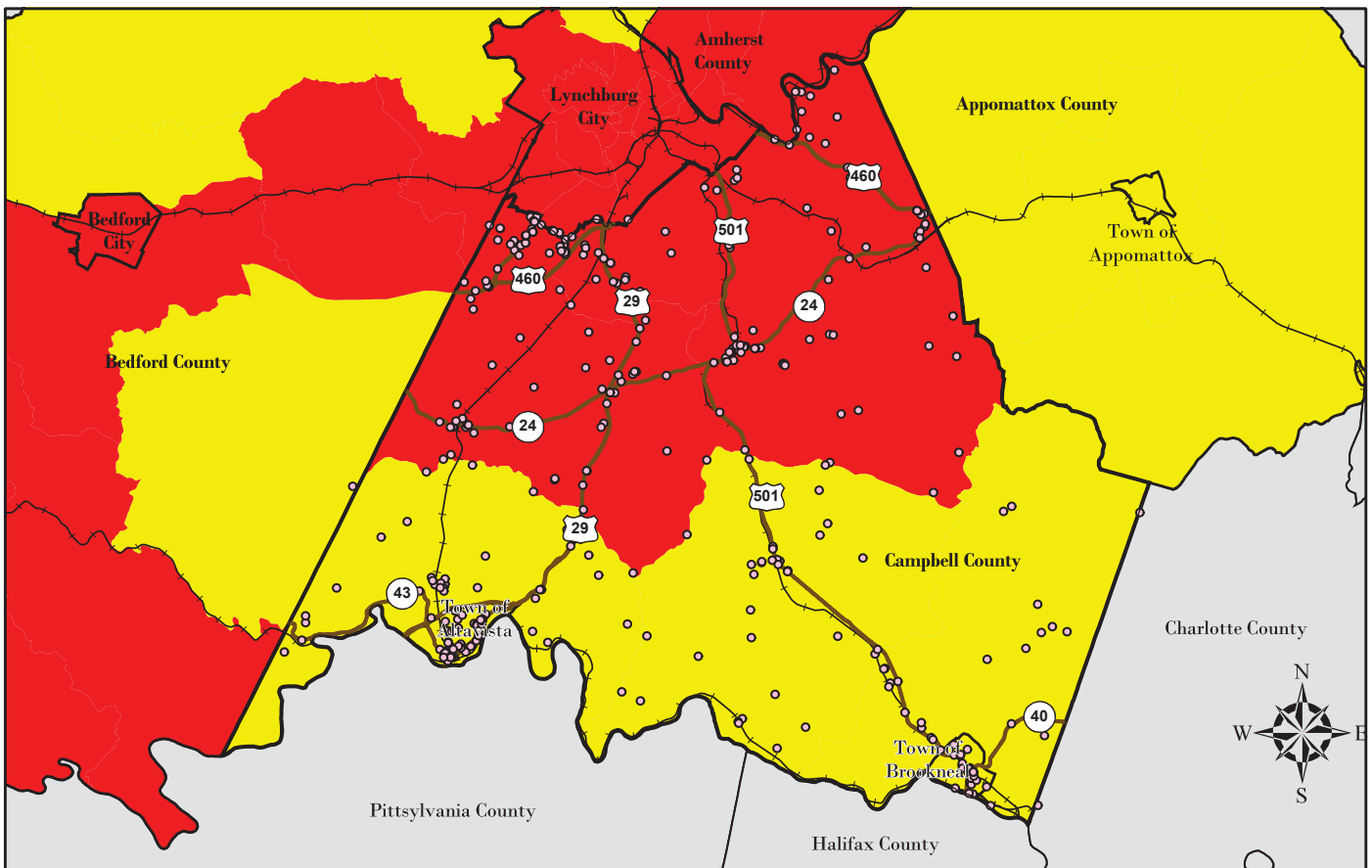
0 1.5 3 6 Miles

Data Sources: VT CGIT, ESRI, Region 2000, VDOT,
FEMA FIRMs

Bedford City - Relative Ice Potential



Campbell County - Relative Ice Potential



Ice Potential by Census Block

- | | | |
|---|--|---|
| Medium Potential | Roads | Critical Facilities |
| High Potential | Major Highways | +++ Railroads |

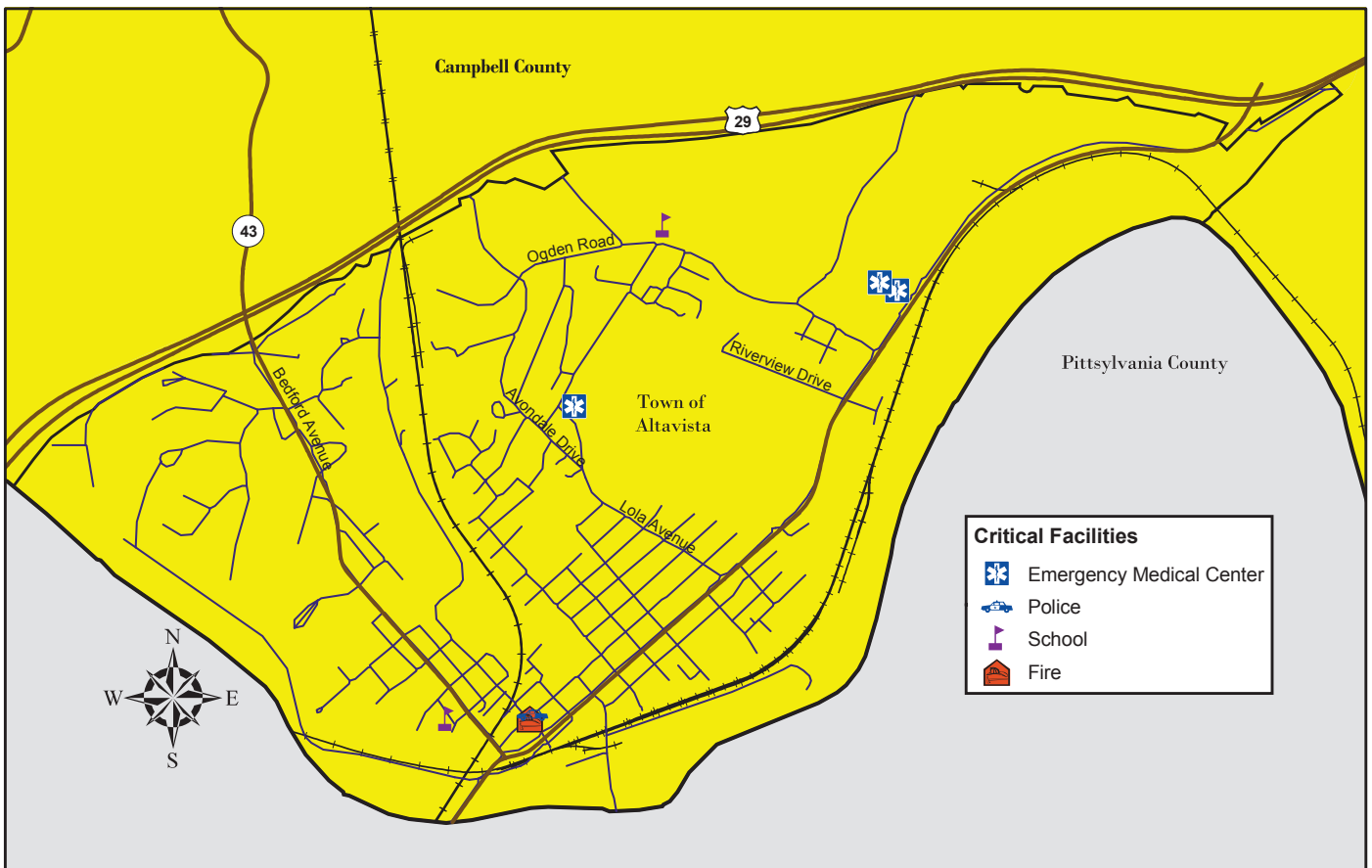
Map prepared by Virginia Tech
Center for Geospatial Information Technology

Date: September 2005

0 1.25 2.5 5 Miles

Data Sources: VT CGIT, ESRI, Region 2000, VDOT, VirginiaView

Town of Altavista- Relative Ice Potential



Ice Potential by Census Block

- Medium Potential
- High Potential
- Roads
- Major Highways
- +

+

 Railroads

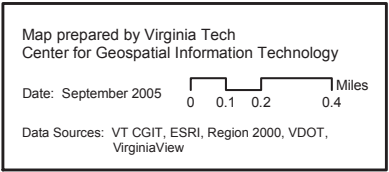
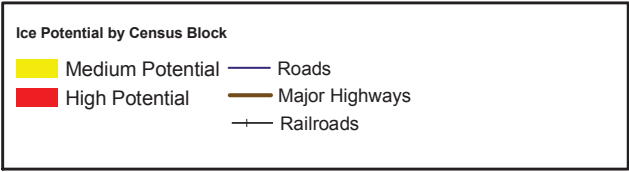
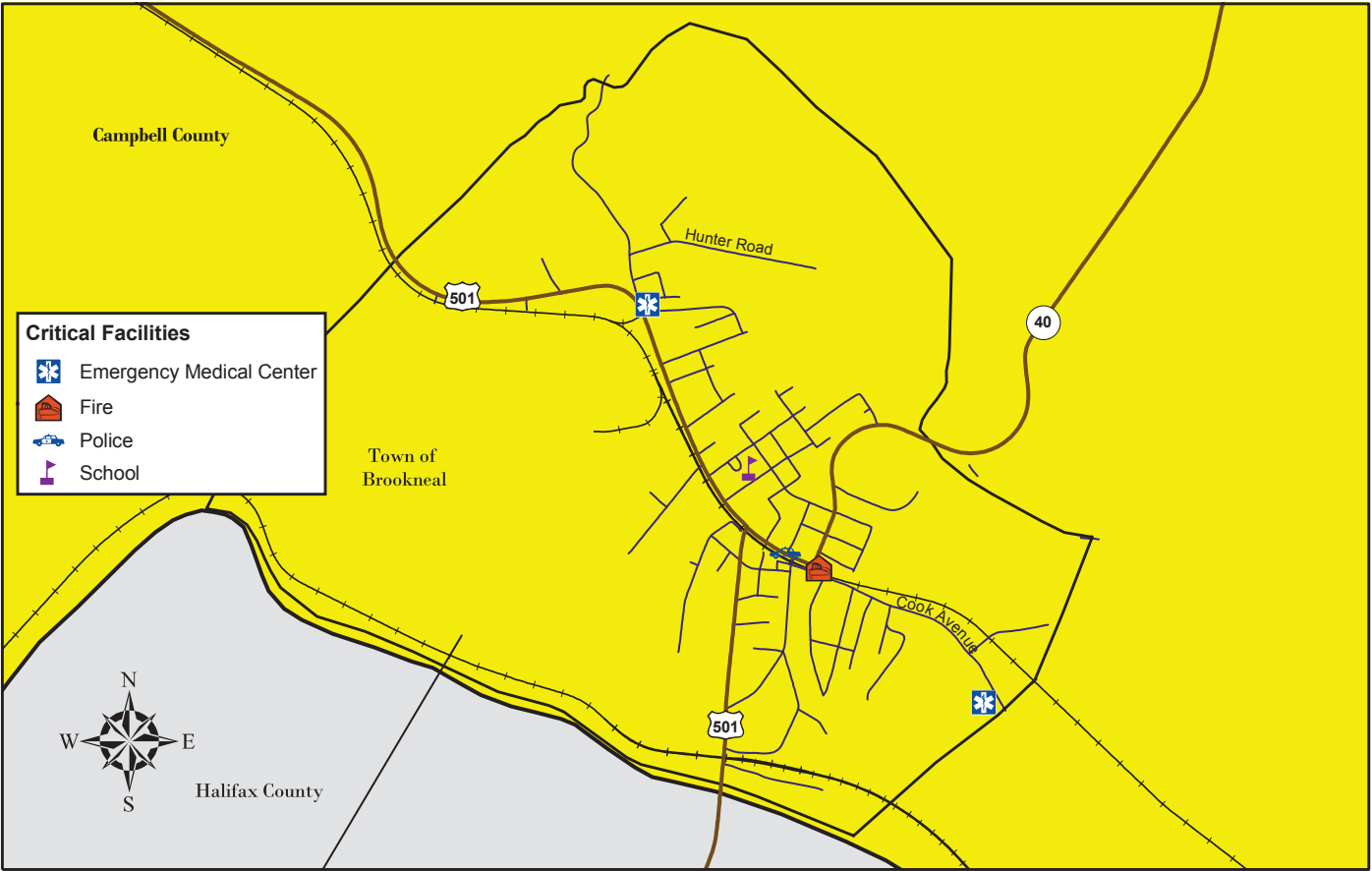
Map prepared by Virginia Tech
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Date: September 2005

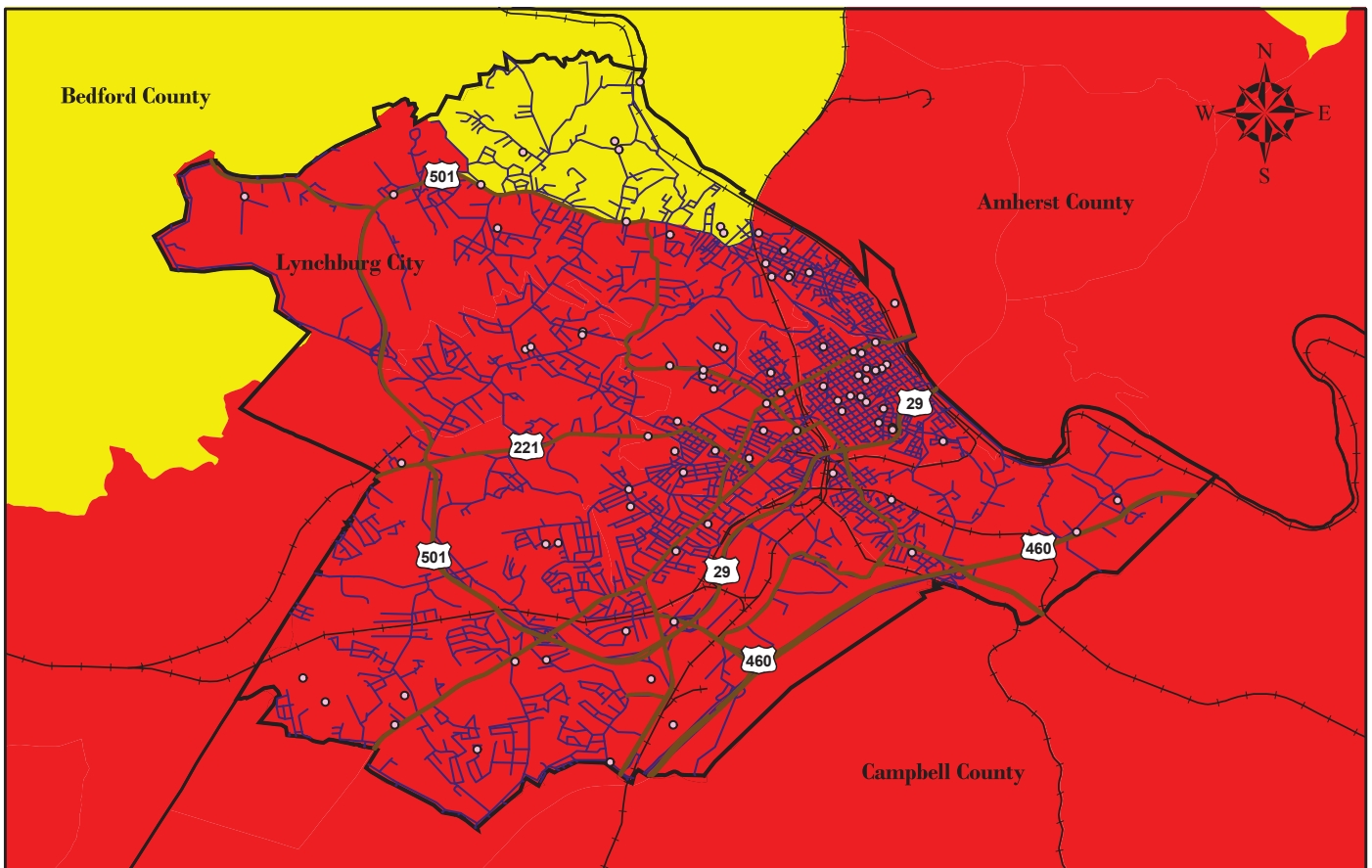
0 0.125 0.25 0.5 Miles

Data Sources: VT CGIT, ESRI, Region 2000, VDOT, VirginiaView

Town of Brookneal- Relative Ice Potential



City of Lynchburg - Relative Ice Potential



Ice Potential by Census Block

- | | | |
|---|--|--|
| Medium Potential | Roads | Critical Facilities |
| High Potential | Major Highways | |
| | Railroads | |

Map prepared by Virginia Tech
Center for Geospatial Information Technology

Date: September 2005

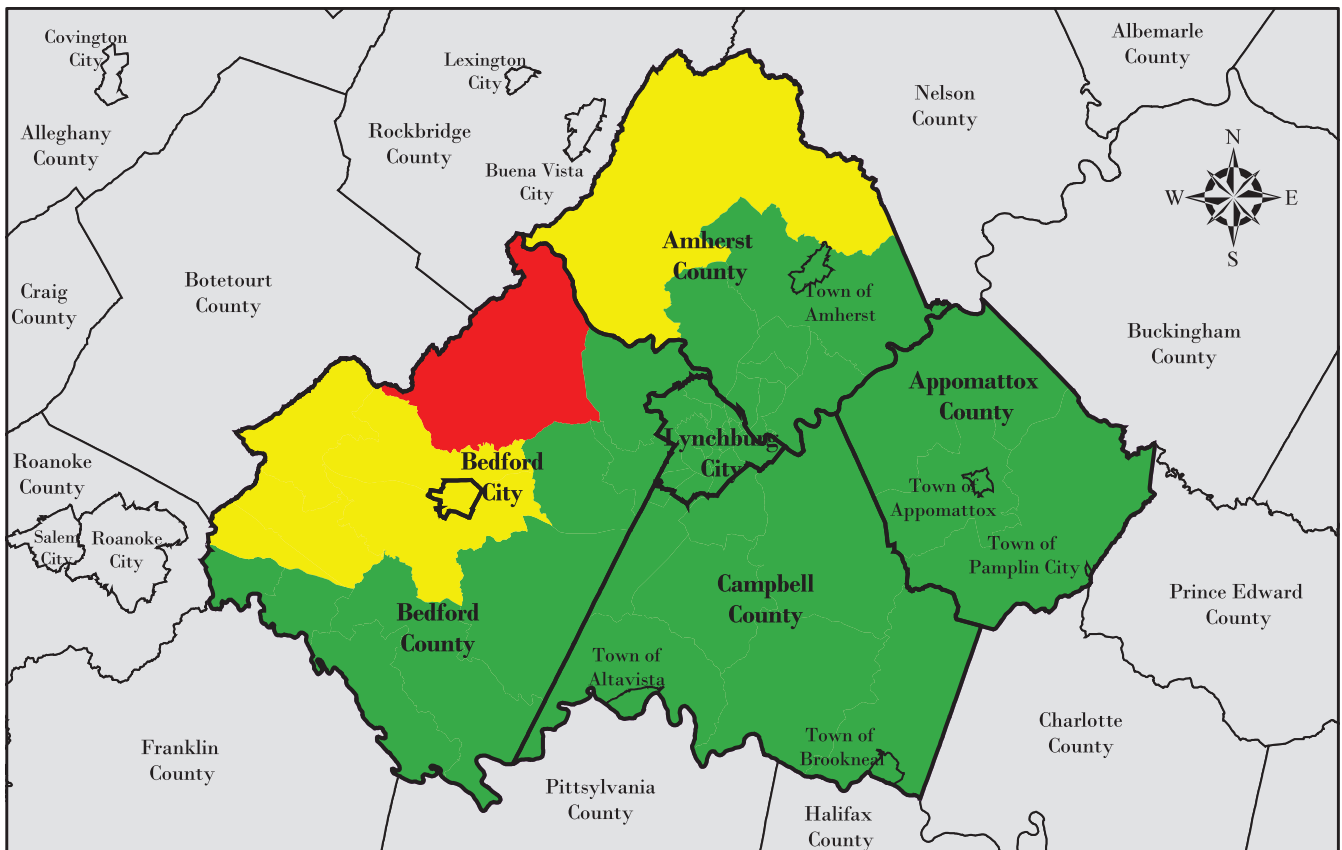
0 0.45 0.9 1.8 Miles

Data Sources: VT CGIT, ESRI, Region 2000, VDOT, VirginiaView

Appendix 5.9

Relative Snow Potential Maps

Region 2000 - Relative Snowfall Risk



Snow Potential by Census Block

- Low Potential
- Medium Potential
- High Potential

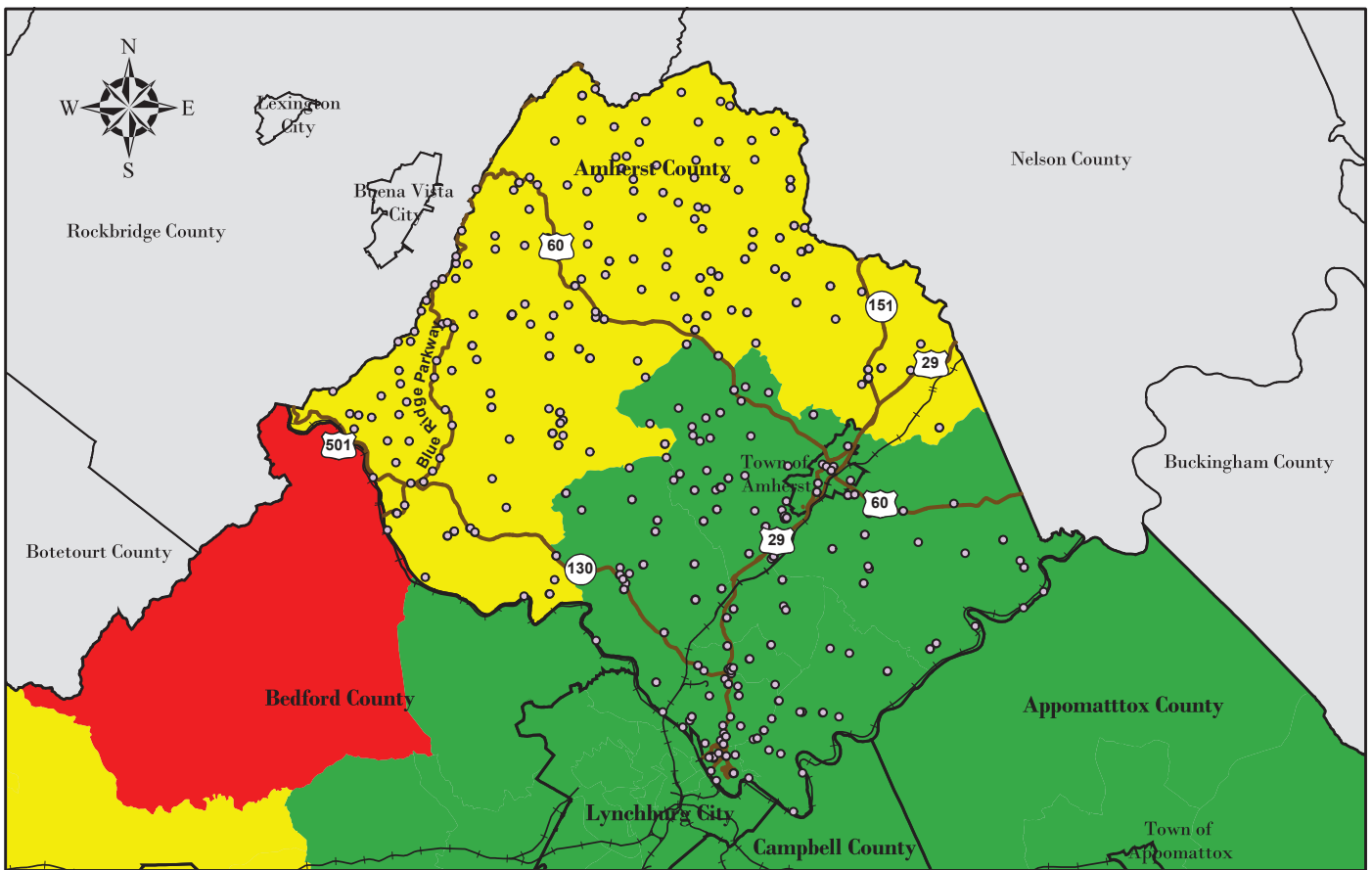
0 4 8 16 Miles

Map prepared by Virginia Tech
Center for Geospatial Information Technology

Date: September 2005

Data Sources: VT CGIT, Region 2000, ESRI,
VirginiaView PRISM

Amherst County - Relative Snow Potential



Snow Potential by Census Block

- | | | |
|---|---|--|
| Low Potential | Roads | Critical Facilities |
| Medium Potential | Major Highways | |
| High Potential | ++ Railroads | |

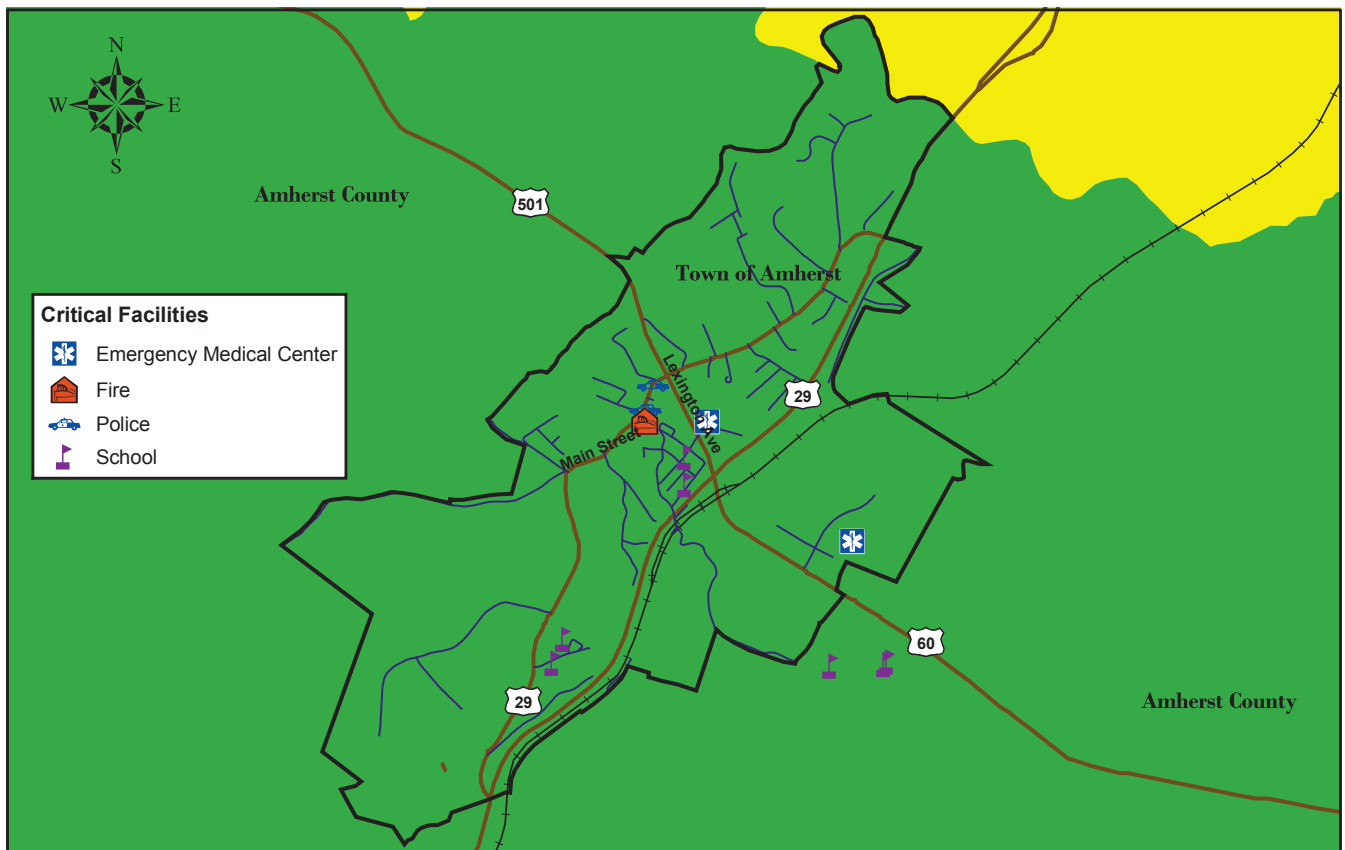
Map prepared by Virginia Tech
Center for Geospatial Information Technology

Date: September 2005

0 1.5 3 6 Miles

Data Sources: VT CGIT, ESRI, Region 2000, VDOT,
VirginiaView

Town of Amherst - Relative Snowfall Potential



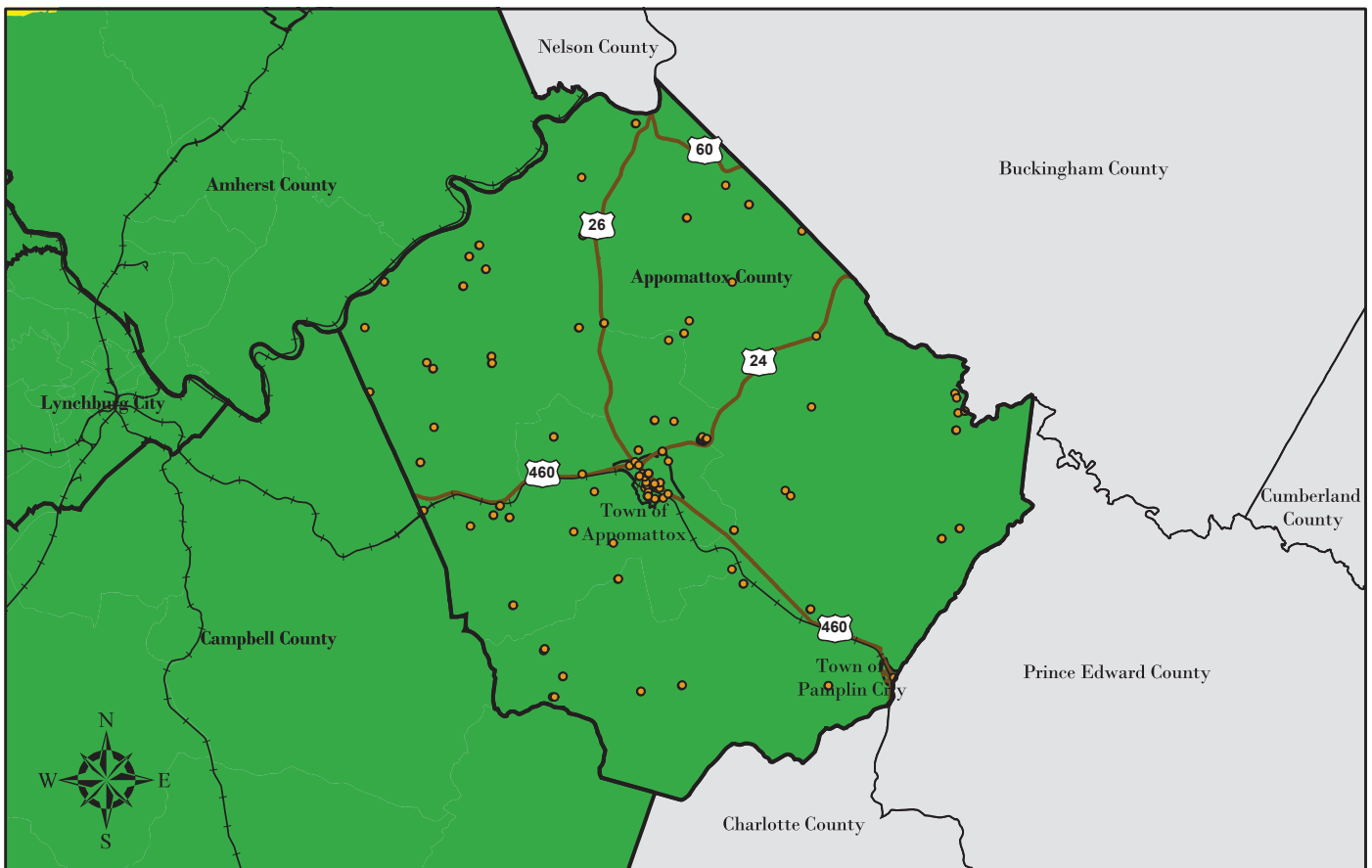
Map prepared by Virginia Tech
Center for Geospatial Information Technology

Date: September 2005

0 0.125 0.25 0.5 Miles

Data Sources: VT CGIT, ESRI, Region 2000, VDOT, VirginiaView

Appomattox County - Relative Snowfall Potential



Snow Potential by Census Block

- | | | |
|---|--|---|
| Low Potential | Roads | Critical Facilities |
| Medium Potential | Major Highways | |
| High Potential | ++ Railroads | |

Map prepared by Virginia Tech
Center for Geospatial Information Technology

Date: September 2005 0 1.25 2.5 5 Miles

Data Sources: VT CGIT, ESRI, Region 2000, VDOT, VirginiaView

Town of Appomattox - Relative Snow Potential



Critical Facilities

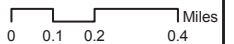
- Emergency Medical Center
- Fire
- Police
- Schools

Snow Potential by Census Block

- Low Potential
- Medium Potential
- High Potential
- Roads
- Major Highways
- Railroads

Map prepared by Virginia Tech
Center for Geospatial Information Technology

Date: September 2005



Data Sources: VT CGIT, ESRI, Region 2000, VDOT, VirginiaView

Town of Pamplin- Relative Snow Potential



Snow Potential by Census Block

- | | |
|------------------|----------------|
| Low Potential | Roads |
| Medium Potential | Major Highways |
| High Potential | Railroads |

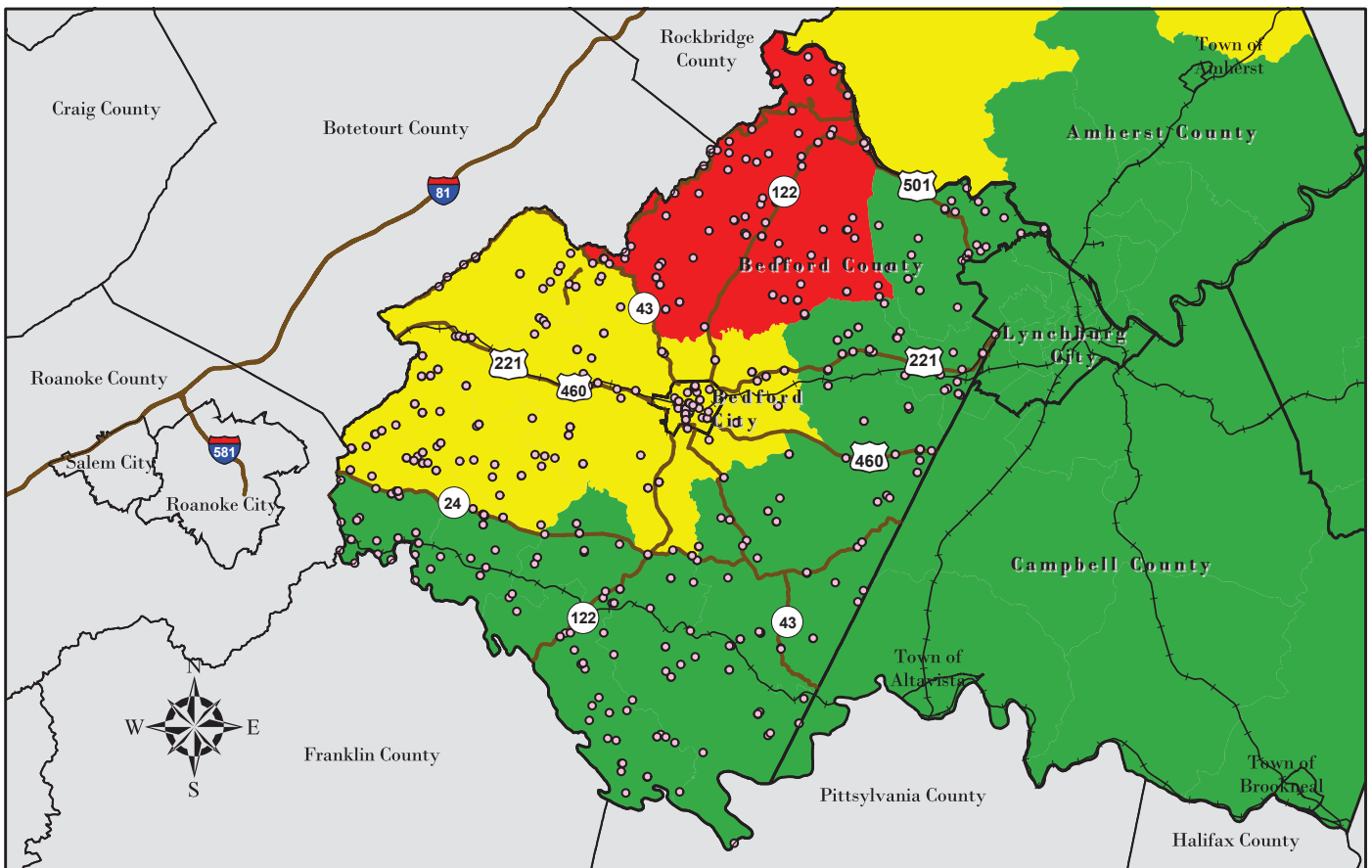
Map prepared by Virginia Tech
Center for Geospatial Information Technology

Date: September 2005

0 0.04 0.08 0.16 Miles

Data Sources: VT CGIT, ESRI, Region 2000, VDOT, VirginiaView

Bedford County - Relative Snow Potential



Snow Potential by Census Block

- | | | |
|---|--|--|
| Low Potential | Roads | Critical Facilities |
| Medium Potential | Major Highways | |
| High Potential | Railroads | |

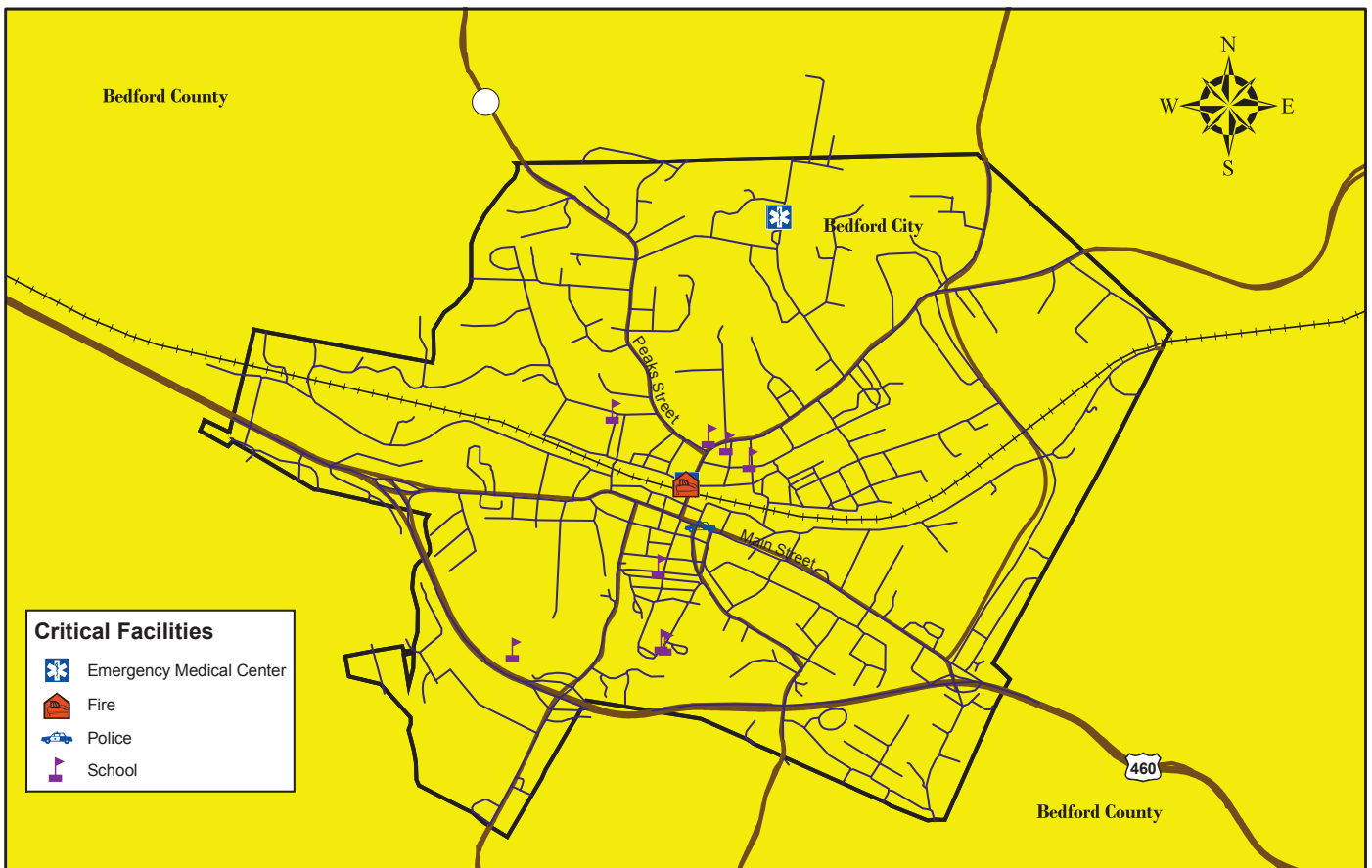
Map prepared by Virginia Tech
Center for Geospatial Information Technology

Date: September 2005

0 1.5 3 6 Miles

Data Sources: VT CGIT, ESRI, Region 2000, VDOT,
VirginiaView

Bedford City - Relative Snow Potential



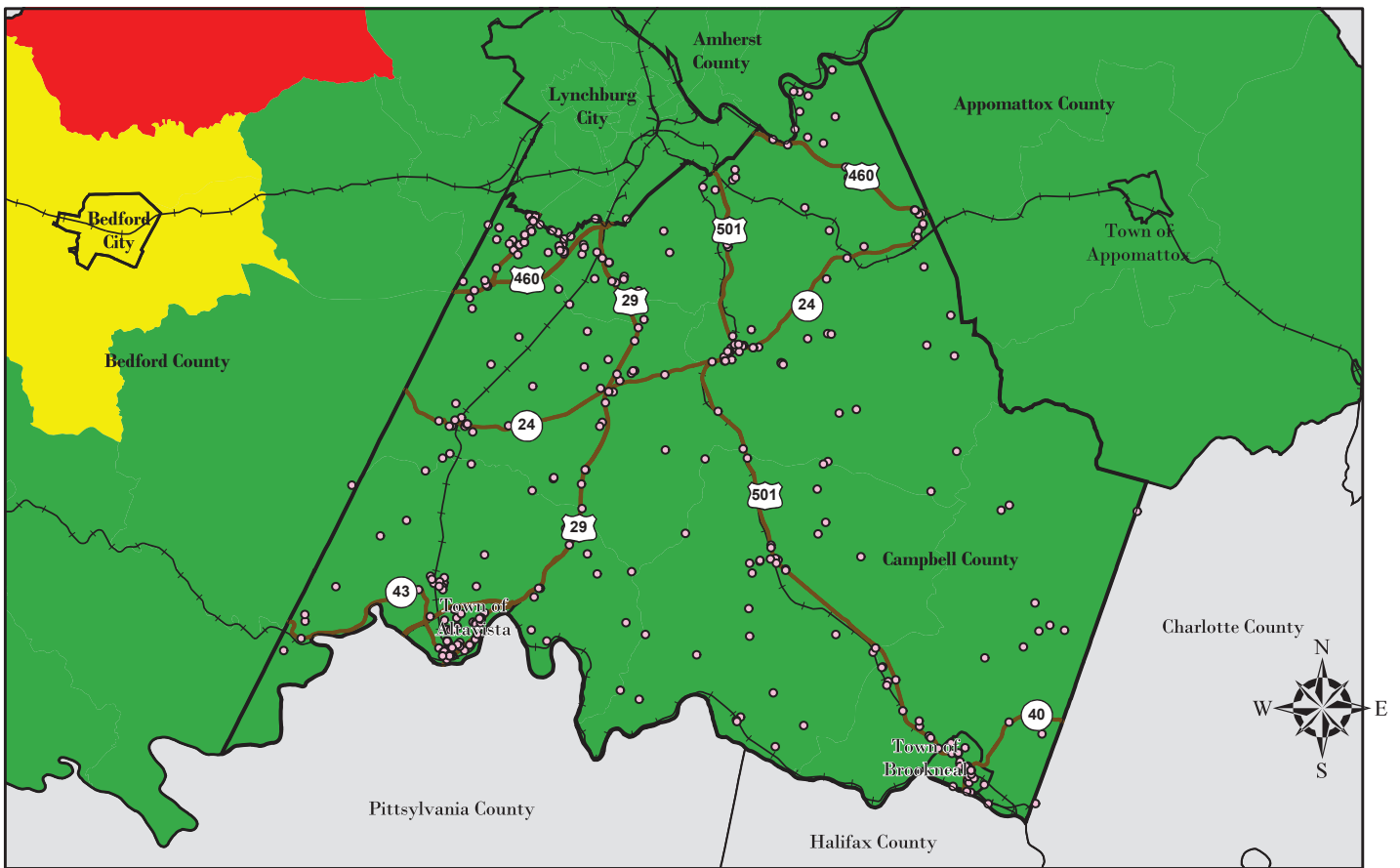
Map prepared by Virginia Tech
Center for Geospatial Information Technology

Date: September 2005

0 0.15 0.3 0.6 Miles

Data Sources: VT CGIT, ESRI, Region 2000, VDOT, VirginiaView

Campbell County - Relative Snow Potential



Snow Potential by Census Block

- | | | |
|---|--|--|
| Low Potential | Roads | Critical Facilities |
| Medium Potential | Major Highways | |
| High Potential | Railroads | |

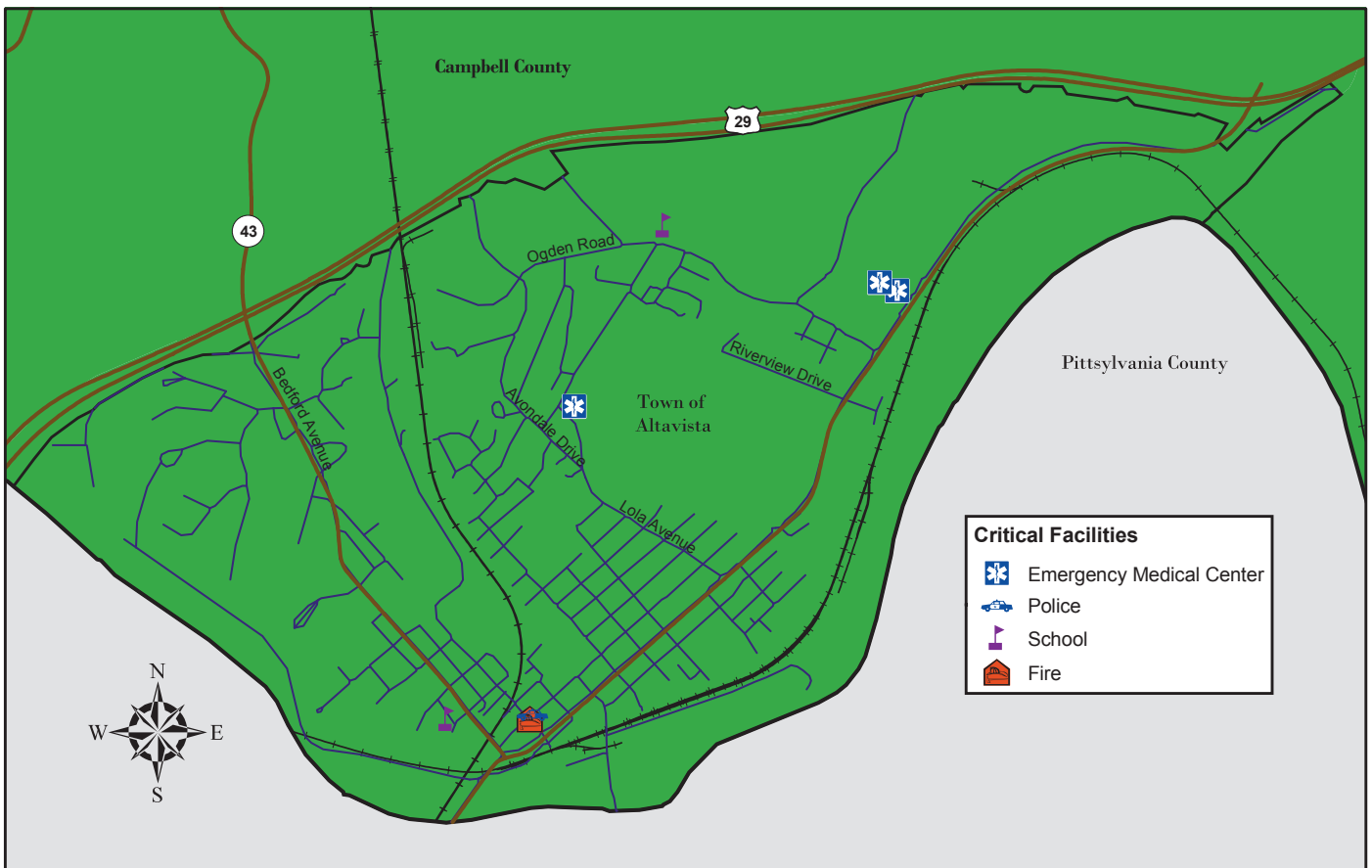
Map prepared by Virginia Tech
Center for Geospatial Information Technology

Date: September 2005





0 1.25 2.5 5 Miles

Data Sources: VT CGIT, ESRI, Region 2000, VDOT,
VirginiaView







Town of Altavista- Relative Snow Potential




Critical Facilities

-  Emergency Medical Center
-  Police
-  School
-  Fire

Snow Potential by Census Block

-  Low Potential
-  Medium Potential
-  High Potential
-  Roads
-  Major Highways
-  Railroads

Map prepared by Virginia Tech
Center for Geospatial Information Technology





Date: September 2005  Miles

Data Sources: VT CGIT, ESRI, Region 2000, VDOT, VirginiaView

Town of Brookneal- Relative Snow Potential









Critical Facilities

-  Emergency Medical Center
-  Fire
-  Police
-  School

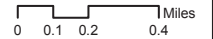


Snow Potential by Census Block

-  Low Potential
-  Medium Potential
-  High Potential
-  Roads
-  Major Highways
-  Railroads

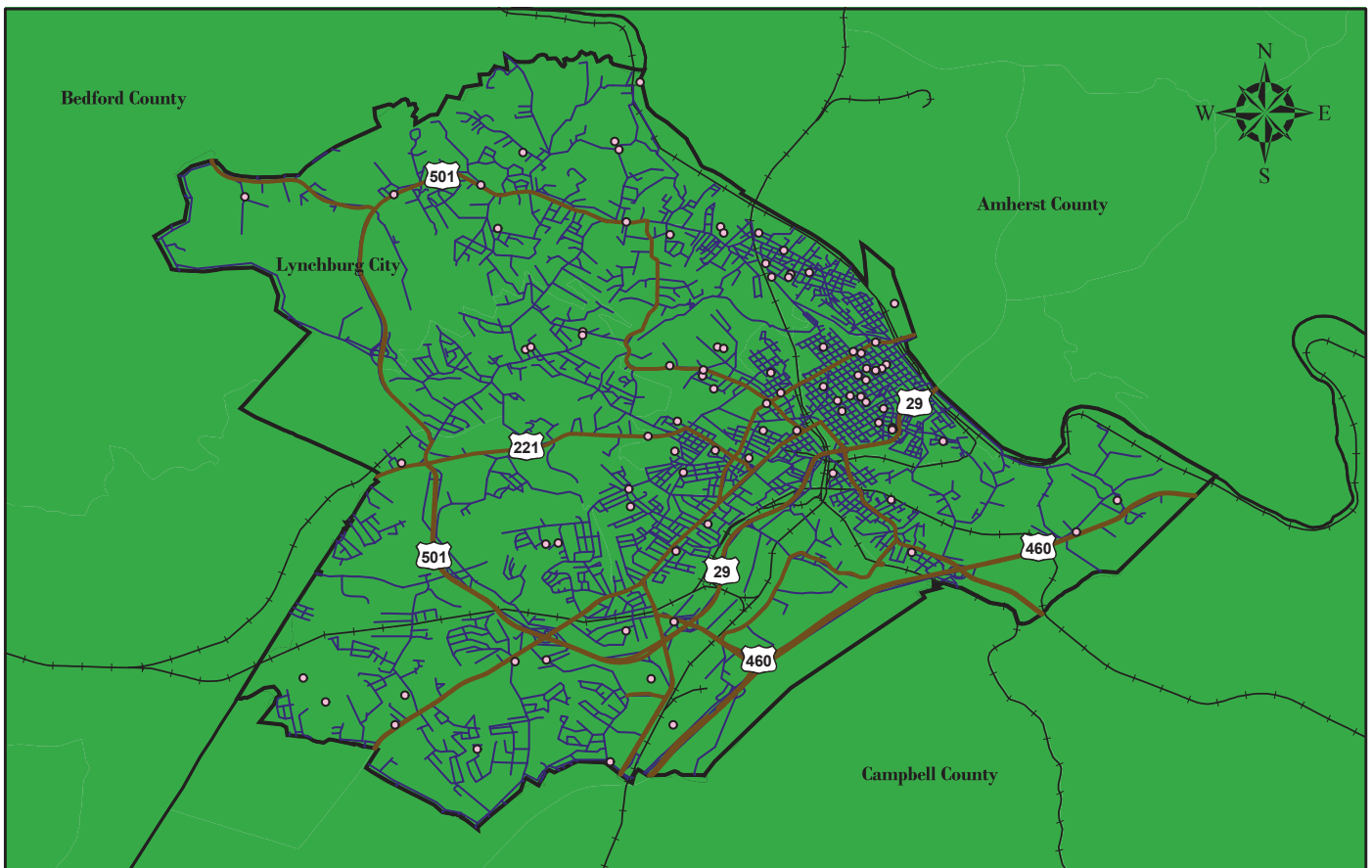
Map prepared by Virginia Tech
Center for Geospatial Information Technology

Date: September 2005



Data Sources: VT CGIT, ESRI, Region 2000, VDOT,
VirginiaView

City of Lynchburg - Relative Snow Potential



Snow Potential by Census Block

- | | | |
|------------------|----------------|---------------------|
| Low Potential | Roads | Critical Facilities |
| Medium Potential | Major Highways | |
| High Potential | Railroads | |

Map prepared by Virginia Tech
Center for Geospatial Information Technology

Date: September 2005

0 0.45 0.9 1.8 Miles

Data Sources: VT CGIT, ESRI, Region 2000, VDOT,
VirginiaView

Appendix 5.10
September 15, 2011
Meeting Minutes

Introduction

- Project Management team signed in:

Name	Jurisdiction	Email Address
Gary Roakes	Amherst County	gmroakes@countyofamherst.com
Kelvin Brown	Amherst, Town of	kelvin.brown@amherstva.gov
Johnnie Roark	Appomattox County	johnnie.roark@appomattoxcountyva.gov
Roxanne Paulette	Appomattox, Town of	rpaulette@appomattoxva.gov
Bob Mitchell	Pamplin City, Town of	townofpamplin@aol.com
Tracy Fairchild	Campbell County	tmfairchild@co.campbell.va.us
Bill Aldridge	Lynchburg City	william.aldrich@lynchburgva.gov
Todd Styles	Volunteer Firefighter	volunteerfire@aol.com
Philipp Gabathuler	Region 2000	pgabathuler@region2000.org
Bob White	Region 2000	bwhite@region2000.org
Debbie Messmer	VDEM	debbie.messmer@vdem.virginia.org

- Project management team went around and made introductions and what they hoped to get out of the HIRA process.
- Handouts passed out
 - Agenda
 - HIRA Worksheet
 - HIRA Powerpoint slides
 - FEMA's Hazard Mitigation Basics Handout
- Purpose and History of the Mitigation Plan
 - Philipp Gabathuler provided a brief overview on what was covered during the first project management team meeting.
- Planning Process, Timeline and Grant Funding
 - Philipp Gabathuler briefly discussed the timeline.
 - Attendees agreed on the timetable and that it was reasonable.
- HIRA re-evaluation
 - Project management team agreed that the same HIRA rankings could be used for each jurisdiction.
 - Project management team agreed that HIRA rankings were still viable from the original 2006 plan.
 - Project management team agreed that earthquakes should be evaluated in the plan update given the recent 5.8 magnitude earthquake in Mineral, VA
 - Review current hazards and identify any new hazards since the 2006 plan was created
 - Project management team discussed the terrorism hazard and agreed it should remain in the plan even though it isn't a natural hazard.
 - Problem spot mapping was discussed and project management team gave input on where specific hazards were most prevalent in their jurisdictions.
- HIRA worksheet was reviewed and filled out by the project management team.
- Wrap up discussion. Next meeting date was scheduled and confirmed.

Appendix 5.1 1
September 15, 2011
Meeting Agenda

Agenda
Region 2000 Hazard Mitigation Plan
Meeting #2: HIRA
September 15th, 2011
12-1:30
Region 2000 Conference Room
Bank of the James Office Building
828 Main Street
Lynchburg, VA 24504

- 1) Lunch
- 2) Welcome and Introductions
- 3) Today's Agenda and Plan Purpose Review
- 4) Presentation on Results of Risk Assessment from 2006 Plan/VDEM Plan
 - a. Hazard Profiles
 - b. Vulnerability Assessment
 - c. Summary of Key Issues
 - d. Call for community critical facilities data
- 5) Formation of new HIRA ranking system
- 6) Planning for Public Involvement
- 7) Next Steps

Section VI

Appendix

Mitigation Goals and Strategies



Appomattox County Proposed Mitigation Actions

[illegible]

Appomattox County Proposed Mitigation Actions

[illegible]

Town of Appomattox Proposed Mitigation Actions

Strategy ID Number	Strategy Description	Status	Priority 2006	Priority 2013	Timeline	Hazard to be Mitigated	Lead Agency	Category (s)	Potential funding sources
1-1	Weather Related Hazards Education	Ongoing	Medium	Medium	As funding becomes available	All Hazards	Emergency services	1-1	Local Community Training Budgets, VDEM and FEMA Planning Funds (PDM/HMGP) Staff Time and Existing Budgets
	Overall educational coordination effort with insurance companies to inform citizens on what hazards a given policy covers.								
	Winter Weather: Driving Safety								
	Flood: Target flood prone properties for acquisition/demo; acquisition/relocation; flood proofing, floodplain awareness, driving safety								
	Drought: Conservation Strategies, Water Use, Crop and Livestock Management								
	Wildfire: Preventing wildfires, living in woodland communities.								
	Wind: Building Codes, wind-proofing, tree and property management								
1-6	Money for Wildfire Mitigation	Ongoing	Low	Low	As funding becomes available	Wildfire	Emergency services	1-6	Virginia Department of Forestry, Existing budgets
	Publicize the VDOF's Money for Mitigation Program and use existing wildfire maps to prioritize areas in the Region. Financial assistance to reduce fire hazards has been established at VDOF. The program provides 50/50 cost share funds to reduce wildfire fuels. Citizen's groups and homeowner's associations are eligible applicants. This action attempt to provide education to potential beneficiaries of the Money for Mitigation program.								
2-3	Floodplain Updates and Assessment of What's At Risk	Ongoing	Low	Low	As funding becomes available	Flood	Emergency services	2-3	To be determined
	Monitor and update floodplain maps for the region. Delineation within the region, and assess the number of homes and critical structures that reside within the floodplain boundaries. Determine areas of concern within each of the communities.								
3-5	Integrating Human Caused Hazards into EOPs	Ongoing	Medium	Medium	As funding becomes available	All Hazards	Emergency services	3-5	Community EOP Update Budget, VDEM and FEMA Planning Funding (PDM, HMGP)
	FEMA uses the term "Human-caused hazards" to address those hazards that are primarily due to the actions of people. This includes hazards of a chemical, biological, radiological, and explosive nature. Local community EOPs address these hazards at different levels. This proposed mitigation action would evaluate current EOPs for Region 2000 and determine if coverage of human-caused hazards is adequate or needs expansion.								
4-1	Maintaining Critical Facilities during Power Disruptions	Ongoing	Medium	Medium	As funding becomes available	All Hazards	Emergency services	4-1	VDEM and FEMA Planning Funds (PDM/HMGP) CIP Budgets
	During disasters, communities need the assurance that their critical facilities are able to stay in operation. Making buildings ready to receive generators and installing generators would allow critical facilities--i.e. water treatment facilities, hospitals, etc.--to maintain their operational status.								
4-3	Evaluate and establish adequate drainage systems	Ongoing	Low	Low	As funding becomes available	Flood	Emergency services	4-3	To be determined
	Assess methods of remediating water contamination in a timely manner by improving water treatment and distribution procedures and evaluating hazardous materials that can be deposited into drainage systems.								
4-7	Monitoring and Maintain areas near right of ways	Ongoing	Low	Low	As funding becomes available	All Hazards	Emergency services	4-7	VDOT, VDOF, Utility Companies, Existing Budgets
	Monitor the location of old, weak, or dying trees within the region that are near homes, public facilities, and other critical facilities and cut down any that are vulnerable to falling down during wind events.								
5-1	NFIP Participation and Education	Ongoing	High	High	As funding becomes available	Flood	Emergency services	5-1	Existing budgets
	Floodplain identification and Mapping: This item could include maintenance of publicly accessible copy of effective FIRM (flood insurance rate map) maps and FIS (flood insurance study), adopting the most current DFIRM or FIRM and FIS, Support of local requests for map updates, sharing with FEMA any new technical or scientific data that could result in map revisions within 6 months of creation or identification of new data, assisting with local floodplain determinations, and maintaining a record of approved Letters of Map Change.								

Town of Appomattox Proposed Mitigation Actions

[illegible]

Amherst County Proposed Mitigation Actions

Strategy ID Number	Strategy Description	Status	Priority 2006	Priority 2013	Timeline	Hazard to be Mitigated	Lead Agency	Category (s)	Potential funding sources
1-1	Weather Related Hazards Education: Develop programs for educating citizens within the region about prevalent weather-related hazards to increase their awareness, preparation, and plan of action during the events. This can be done in coordination with the National Weather Service or VDEM officials. Some examples include:	Ongoing	Low	Low	As funding becomes available	All Hazards	Emergency services	1-1	Local Community Training Budgets, VDEM and FEMA Planning Funds (PDM/HMGP) Staff Time and Existing Budgets
	Overall educational coordination effort with insurance companies to inform citizens on what hazards a given policy covers.								
	Winter Weather: Driving Safety								
	Flood: Target flood prone properties for acquisition/demo; acquisition/relocation; flood proofing, floodplain awareness, driving safety								
	Drought: Conservation Strategies, Water Use, Crop and Livestock Management								
	Wildfire: Preventing wildfires, living in woodland communities.								
	Wind: Building Codes, wind-proofing, tree and property management								
1-4	Drought Mitigation- Education on alleviating conditions	Ongoing	Low	Low	As funding becomes available	Drought	Emergency services	1-4	County planning budgets
	Organize workshops on special drought-related topics to help alleviate drought conditions. Potential topics to consider: water restrictions, agricultural permits. This action will be completed by each jurisdiction, independent of the other jurisdictions in the "Communities Involved".								
1-5	Dry Hydrant Installation - Location Optimization	Ongoing	Low	Low	As funding becomes available	Drought	Emergency services	1-5	VDOF grants, local communities, property owners, local fire departments
	(See Dry Hydrant Installation Hazard Mitigation Plan for details about dry hydrants.) This program would be used to disseminate information on dry hydrant installation and their benefits. The program would focus on the education of those that are determined to be the most able to benefit from dry hydrants, such as those living in woodland communities. These people could be determined by studies dedicated to the determination of areas most susceptible to wildfire damage, including consideration of distance to the nearest water source, and travel time to the nearest fire station. Each jurisdiction will do independent scoping projects.								
2-3	Floodplain Updates and Assessment of What's At Risk	Ongoing	Medium	Medium	As funding becomes available	Flood	Emergency services	2-3	VA DCR, FEMA/VDEM
	Monitor and update floodplain maps for the region. Delineation within the region, and assess the number of homes and critical structures that reside within the floodplain boundaries. Determine areas of concern within each of the communities.								
3-3	Drought Mitigation - Voluntary restrictions	Ongoing	Low	Low	As funding becomes available	Drought	Emergency services	3-3	Virginia Department of Forestry, Existing budgets
	Negotiate with irrigators to gain voluntary restrictions on irrigation in areas where domestic wells are likely to be affected, or suspend water use permits in watersheds with low water levels.								
3-5	Integrating Human Caused Hazards into EOPs	Ongoing	Medium	Medium	As funding becomes available	All Hazards	Emergency services	3-5	Community EOP Update Budget, VDEM and FEMA Planning Funding (PDM, HMGP)
	FEMA uses the term "Human-caused hazards" to address those hazards that are primarily due to the actions of people. This includes hazards of a chemical, biological, radiological, and explosive nature. Local community EOPs address these hazards at different levels. This proposed mitigation action would evaluate current EOPs for Region 2000 and determine if coverage of human-caused hazards is adequate or needs expansion.								
4-1	Maintaining Critical Facilities during Power Disruptions	Ongoing	High	High	As funding becomes available	All Hazards	Emergency services	4-1	VDEM and FEMA Planning Funds (PDM/HMGP) CIP Budgets
	During disasters, communities need the assurance that their critical facilities are able to stay in operation. Making buildings ready to receive generators and installing generators would allow critical facilities--i.e. water treatment facilities, hospitals, etc.--to maintain their operational status.								
4-3	Evaluate and establish adequate drainage systems	Ongoing	Medium	Medium	As funding becomes available	Flood	Emergency services	4-3	Existing budgets
	Assess methods of remediating water contamination in a timely manner by improving water treatment and distribution procedures and evaluating hazardous materials that can be deposited into drainage systems.								
4-4	Drought Mitigation- Agriculture Watering Locations	Ongoing	Low	Low	As funding becomes available	Drought	Emergency services	4-4	USDA Grants
	List watering locations for local livestock, as well as establishing water hauling programs for livestock.								

[illegible]

Town of Amherst Proposed Mitigation Actions

Strategy ID Number	Strategy Description	Status	Priority 2006	Priority 2013	Timeline	Hazard to be Mitigated	Lead Agency	Category (s)	Potential funding sources
1-1	Weather Related Hazards Education	Ongoing	Low	Low	As funding becomes available	All Hazards	Emergency services	1-1	Local Community Training Budgets, VDEM and FEMA Planning Funds (PDM/HMGP) Staff Time and Existing Budgets
	Overall educational coordination effort with insurance companies to inform citizens on what hazards a given policy covers.								
	Winter Weather: Driving Safety								
	Flood: Target flood prone properties for acquisition/demo; acquisition/relocation; flood proffing, floodplain awareness, driving safety								
	Drought: Conservation Strategies, Water Use, Crop and Livestock Management								
	Wildfire: Preventing wildfires, living in woodland communities.								
	Wind: Building Codes, wind-proofing, tree and property management								
1-4	Drought Mitigation- Education on alleviating conditions	Ongoing	Low	Low	As funding becomes available	Drought	Emergency services	1-4	County planning budgets
	Organize workshops on special drought-related topics to help alleviate drought conditions. Potential topics to consider: water restrictions, agricultural permits. This action will be completed by each jurisdiction, independent of the other jurisdictions in the "Communities Involved".								
1-5	Dry Hydrant Installation - Location Optimization	Ongoing	Low	Low	As funding becomes available	Drought	Emergency services	1-5	VDOF grants, local communities, property owners, local fire departments
	(See Dry Hydrant Installation Hazard Mitigation Plan for details about dry hydrants.) This program would be used to disseminate information on dry hydrant installation and their benefits. The program would focus on the education of those that are determined to be the most able to benefit from dry hydrants, such as those living in woodland communities. These people could be determined by studies dedicated to the determination of areas most susceptible to wildfire damage, including consideration of distance to the nearest water source, and travel time to the nearest fire station. Each jurisdiction will do independent scoping projects.								
2-3	Floodplain Updates and Assessment of What's At Risk	Ongoing	Medium	Medium	As funding becomes available	Flood	Emergency services	2-3	VA DCR, FEMA/VDEM
	Monitor and update floodplain maps for the region. Delineation within the region, and assess the number of homes and critical structures that reside within the floodplain boundaries. Determine areas of concern within each of the communities.								
3-3	Drought Mitigation - Voluntary restrictions	Ongoing	Low	Low	As funding becomes available	Drought	Emergency services	3-3	Virginia Department of Forestry, Existing budgets
	Negotiate with irrigators to gain voluntary restrictions on irrigation in areas where domestic wells are likely to be affected, or suspend water use permits in watersheds with low water levels.								
3-5	Integrating Human Caused Hazards into EOPs	Ongoing	Medium	Medium	As funding becomes available	All Hazards	Emergency services	3-5	Community EOP Update Budget, VDEM and FEMA Planning Funding (PDM, HMGP)
	FEMA uses the term "Human-caused hazards" to address those hazards that are primarily due to the actions of people. This includes hazards of a chemical, biological, radiological, and explosive nature. Local community EOPs address these hazards at different levels. This proposed mitigation action would evaluate current EOPs for Region 2000 and determine if coverage of human-caused hazards is adequate or needs expansion.								
4-1	Maintaining Critical Facilities during Power Disruptions	Ongoing	High	High	As funding becomes available	All Hazards	Emergency services	4-1	VDEM and FEMA Planning Funds (PDM/HMGP) CIP Budgets
	During disasters, communities need the assurance that their critical facilities are able to stay in operation. Making buildings ready to receive generators and installing generators would allow critical facilities--i.e. water treatment facilities, hospitals, etc.--to maintain their operational status.								
4-3	Evaluate and establish adequate drainage systems	Ongoing	Medium	Medium	As funding becomes available	Flood	Emergency services	4-3	Existing budgets
	Assess methods of remediating water contamination in a timely manner by improving water treatment and distribution procedures and evaluating hazardous materials that can be deposited into drainage systems.								
4-4	Drought Mitigation- Agriculture Watering Locations	Ongoing	Low	Low	As funding becomes available	Drought	Emergency services	4-4	USDA Grants
	Drought mitigation in the agriculture sector would require listing watering locations for local livestock, as well as establishing water hauling programs for livestock. For crops, issue emergency irrigation permits for using state waters for irrigation.								
4-6	Optimizing Dry Hyrant Installation	Ongoing	Low	Low	As funding becomes available	Drought	Emergency services	4-6	VDOF grants, local communities, property owners, local fire departments

Town of Amherst Proposed Mitigation Actions

[illegible]

Campbell County Proposed Mitigation Actions

Strategy ID Number	Strategy Description	Status	Priority 2006	Priority 2013	Timeline	Hazard to be Mitigated	Lead Agency	Category (s)	Potential funding sources
1-1	Weather Related Hazards Education	Ongoing	Medium	Medium	As funding becomes available	All Hazards	Emergency services	1-1	Local Community Training Budgets, VDEM and FEMA Planning Funds (PDM/HMGP) Staff Time and Existing Budgets
	Overall educational coordination effort with insurance companies to inform citizens on what hazards a given policy covers.								
	Winter Weather: Driving Safety								
	Flood: Target flood prone properties for acquisition/demo; acquisition/relocation; flood proffing, floodplain awareness, driving safety								
	Drought: Conservation Strategies, Water Use, Crop and Livestock Management								
	Wildfire: Preventing wildfires, living in woodland communities.								
	Wind: Building Codes, wind-proofing, tree and property management								
1-2	National Weather Service Storm Ready Program Application	Ongoing	High	High	As funding becomes available	All Hazards	Emergency services	1-2	To be determined
	Storm Ready is a National Weather Service (NWS) run program available for participating counties and communities to prepare and assist clients with communication and safety skills needed to save lives and property before and during weather related disasters. The program works closely with community leaders and emergency managers to strengthen local safety programs, planning, education, and awareness. Actions for this component of the Storm Ready process would be to bring county and community officials and emergency managers together to inform them about the program and discuss the advantages of becoming "Storm Ready." This will also involve brainstorming ways to improve weather related hazard education and increase public awareness of the events.								
1-3	Weather Alert Radio System	Ongoing	Medium	Medium	As funding becomes available	All Hazards	Emergency services	1-3	NWS
	The National Weather Service provides a weather forecast and warning radio system called the "Weather Alert Radio System." This action would provide weather alert radios to schools and other critical public facilities within the region for warning, education, and awareness purposes. This would involve coordinating with the National Weather Service to establish partnerships to provide weather radio access to these special facilities and then contacting the facility representatives to let them know that this weather alert system is available.								
1-4	Drought Mitigation- Education on alleviating conditions	Ongoing	Medium	Medium	As funding becomes available	All Hazards	Emergency services	1-4	County planning budgets
	Organize workshops on special drought-related topics to help alleviate drought conditions. Potential topics to consider: water restrictions, agricultural permits. This action will be completed by each jurisdiction, independent of the other jurisdictions in the "Communities Involved".								
1-5	Dry Hydrant Installation - Location Optimization	Ongoing	Medium	Medium	As funding becomes available	All Hazards	Emergency services	1-5	VDOF grants, local communities, property owners, local fire departments
	(See Dry Hydrant Installation Hazard Mitigation Plan for details about dry hydrants.) This program would be used to disseminate information on dry hydrant installation and their benefits. The program would focus on the education of those that are determined to be the most able to benefit from dry hydrants, such as those living in woodland communities. These people could be determined by studies dedicated to the determination of areas most susceptible to wildfire damage, including consideration of distance to the nearest water source, and travel time to the nearest fire station. Each jurisdiction will do independent scoping projects.								
2-3	Floodplain Updates and Assessment of What's At Risk	Ongoing	Medium	Medium	As funding becomes available	All Hazards	Emergency services	2-3	VA DCR, FEMA and VDEM
	Monitor and update floodplain maps for the region. Delineation within the region, and assess the number of homes and critical structures that reside within the floodplain boundaries. Determine areas of concern within each of the communities.								
2-4	Undergrowth Cleaning/Prescribed Burns-VDOF & local collaboration	Ongoing	Low	Low	As funding becomes available	All Hazards	Emergency services	2-4	Virginia Department of Forestry; Existing Budgets
	The combined resources and knowledge of local fire departments and the Virginia Department of Forestry (VDOF) could be used as the two work together on prescribed burns. VDOF's experience and knowledge of prescribed burns would work in conjunction with the local departments' knowledge of the area, and allow a system of prescribed burns to be enacted. In addition, the local fire department would be charged with managing all data involved; including the specific details of each burn.								
3-1	National Weather Service Storm Ready Operations Plan	Ongoing	High	High	As funding becomes available	All Hazards	Emergency services	3-1	NWS; NOAA; Existing Budgets
	There are population-based guidelines that a county or community must meet before it can be considered "Storm Ready," which are listed here: http://www.stormready.noaa.gov/guideline_chart.htm . Actions for this mitigation strategy include evaluating the current status of each locality that should be in the program to determine which guidelines are already met and develop ways of enhancing policies and resources available to the locality to reach all other necessary requirements and begin the Storm Ready application process. This action also involves developing a formal hazardous weather operation plan for each locality.								
3-4	Undergrowth Cleaning/Prescribed Burns	Ongoing	Low	Low	As funding becomes available	All Hazards	Emergency services	3-4	Virginia Department of Forestry; Existing Budgets

Bedford County Proposed Mitigation Actions

[illegible]

Bedford County Proposed Mitigation Actions

[illegible]

Bedford County Proposed Mitigation Actions

Strategy ID Number	Strategy Description	Status	Priority 2006	Priority 2013	Timeline	Hazard to be Mitigated	Lead Agency	Category (s)	Potential funding sources
	<ul style="list-style-type: none"> Advanced warning systems and hazard gauging systems (weather radios, reverse-911, stream gauges, I-flows) Targeted hazard education Wastewater and storm water management improvements Wildfire Mitigation Projects 								

City of Bedford Proposed Mitigation Actions

Strategy ID Number	Strategy Description	Status	Priority 2006	Priority 2013	Timeline	Hazard to be Mitigated	Lead Agency	Category (s)	Potential funding sources
1-1	Weather Related Hazards Education	Ongoing	Low	Low	As funding becomes available	All Hazards	Emergency services	1-1	Local Community Training Budgets, VDEM and FEMA Planning Funds (PDM/HMGP) Staff Time and Existing Budgets
	Overall educational coordination effort with insurance companies to inform citizens on what hazards a given policy covers.								
	Winter Weather: Driving Safety								
	Flood: Target flood prone properties for acquisition/demo; acquisition/relocation; flood proffing, floodplain awareness, driving safety								
	Drought: Conservation Strategies, Water Use, Crop and Livestock Management								
	Wildfire: Preventing wildfires, living in woodland communities.								
	Wind: Building Codes, wind-proofing, tree and property management								
1-4	Drought Mitigation- Education on alleviating conditions	Ongoing	Low	Low	As funding becomes available	All Hazards	Emergency services	1-4	County Planning budgets
	Organize workshops on special drought-related topics to help alleviate drought conditions. Potential topics to consider: water restrictions, agricultural permits. This action will be completed by each jurisdiction, independent of the other jurisdictions in the "Communities Involved".								
3-3	Drought Mitigation - Voluntary reestrictions	Ongoing	Low	Low	As funding becomes available	All Hazards	Emergency services	3-3	Virginia Department of Forestry, Existing budgets
	Negotiate with irrigators to gain voluntary restrictions on irrigation in areas where domestic wells are likely to be affected, or suspend water use permits in watersheds with low water levels.								
3-5	Integrating Human Caused Hazards into EOPs	Ongoing	Medium	Medium	As funding becomes available	All Hazards	Emergency services	3-5	Community EOP Update Budget, VDEM and FEMA Planning Funding (PDM, HMGP)
	FEMA uses the term "Human-caused hazards" to address those hazards that are primarily due to the actions of people. This includes hazards of a chemical, biological, radiological, and explosive nature. Local community EOPs address these hazards at different levels. This proposed mitigation action would evaluate current EOPs for Region 2000 and determine if coverage of human-caused hazards is adequate or needs expansion.								
4-1	Maintaining Critical Facilities during Power Disruptions	Ongoing	High	High	As funding becomes available	All Hazards	Emergency services	4-1	VDEM and FEMA Planning Funds (PDM/HMGP) CIP Budgets
	During disasters, communities need the assurance that their critical facilities are able to stay in operation. Making buildings ready to receive generators and installing generators would allow critical facilities--i.e. water treatment facilities, hospitals, etc.--to maintain their operational status.								
4-2	Utility Line Protection	Ongoing	Medium	Medium	As funding becomes available	All Hazards	Governing bodies, Utility Companies, Zoning	4-2	To be determined
	Bury powerlines to prevent outages from downed trees, etc.								
4-7	Monitoring and maintain areas near Right of Ways	Ongoing	Low	Low	As funding becomes available	All Hazards	Emergency services	4-7	VDOT, VDOF, Utility Companies, Existing Budgets
	Monitor the location of old, weak, or dying trees within the region that are near homes, public facilities, and other critical facilities and cut down any that are vulnerable to falling down during wind events.								
5-1	NFIP Participation and Education	Ongoing	High	High	As funding becomes available	Flood	Emergency services	5-1	Existing budgets
	Floodplain identification and Mapping: This item could include maintenance of publicly accessible copy of effective FIRM (flood insurance rate map) maps and FIS (flood insurance study), adopting the most current DFIRM or FIRM and FIS, Support of local requests for map updates, sharing with FEMA any new technical or scientific data that could result in map revisions within 6 months of creation or identification of new data, assisting with local floodplain determinations, and maintaining a record of approved Letters of Map Change.								

City of Bedford Proposed Mitigation Actions

[illegible]

[illegible]

Campbell County Proposed Mitigation Actions

Strategy ID Number	Strategy Description	Status	Priority 2006	Priority 2013	Timeline	Hazard to be Mitigated	Lead Agency	Category (s)	Potential funding sources
	<ul style="list-style-type: none"> Elevation of flood prone structures Minor structural flood control projects Relocation of structures from hazard prone areas Retrofitting of existing buildings and facilities Retrofitting of existing buildings and facilities for shelters Infrastructure protection measures Storm water management improvements Advanced warning systems and hazard gauging systems (weather radios, reverse-911, stream gauges, I-flows) Targeted hazard education Wastewater and storm water management improvements Wildfire Mitigation Projects 								

Town of Altavista Proposed Mitigation Actions

[illegible]

[illegible]

[illegible]

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	<p>Flood Insurance: Educate community members about the availability and value of flood insurance, inform community property owners about changes to the DFIRM/FIRM that would impact their insurance rates, provide general assistance to community members relating to insurance issues.</p>								
5-2	Communities will support implementation of structural and non structural mitigation activities to reduce exposure to natural and man-made hazards.	Ongoing	High	High	As funding becomes available	Flood, Thunderstorms	Emergency services	5-2	Existing budgets
	<p>Strategy: Mitigation projects that will result in protection of public or private property from natural hazards. Eligible projects include, but are not</p> <ul style="list-style-type: none">• Acquisition of hazard prone properties• Elevation of flood prone structures• Minor structural flood control projects• Relocation of structures from hazard prone areas• Retrofitting of existing buildings and facilities• Retrofitting of existing buildings and facilities for shelters• Infrastructure protection measures• Storm water management improvements• Advanced warning systems and hazard gauging systems (weather radios, reverse-911, stream gauges, I-flows)• Targeted hazard education• Wastewater and storm water management improvements• Wildfire Mitigation Projects								

Town of Pamplin City Proposed Mitigation Actions

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	Strategy: Mitigation projects that will result in protection of public or private property from natural hazards. Eligible projects include, but are not <ul style="list-style-type: none">• Acquisition of hazard prone properties• Elevation of flood prone structures• Minor structural flood control projects• Relocation of structures from hazard prone areas• Retrofitting of existing buildings and facilities• Retrofitting of existing buildings and facilities for shelters• Infrastructure protection measures• Storm water management improvements• Advanced warning systems and hazard gauging systems (weather radios, reverse-911,stream gauges, I-flows)• Targeted hazard education• Wastewater and storm water management improvements• Wildfire Mitigation Projects								

Strategy ID Number	Strategy Description	Status	Priority 2006	Priority 2013	Timeline	Hazard to be Mitigated	Lead Agency	Category (s)	Potential funding sources
1-1	Weather Related Hazards Education	Ongoing	High	High	ongoing	All Hazards	Emergency services	1-1	Local Community Training Budgets, VDEM and FEMA Planning Funds (PDM/HMGP) Staff Time and Existing Budgets
	Overall educational coordination effort with insurance companies to inform citizens on what hazards a given policy covers.								
	Winter Weather: Driving Safety								
	Flood: Target flood prone properties for acquisition/demo; acquisition/relocation; flood proofing, floodplain awareness, driving safety								
	Drought: Conservation Strategies, Water Use, Crop and Livestock Management								
	Wildfire: Preventing wildfires, living in woodland communities.								
	Wind: Building Codes, wind-proofing, tree and property management								
1-2	National Weather Service Storm Ready Program Application	Ongoing	High	High	Completed	All Hazards	Emergency services	1-2	To be determined
	Storm Ready is a National Weather Service (NWS) run program available for participating counties and communities to prepare and assist clients with communication and safety skills needed to save lives and property before and during weather related disasters. The program works closely with community leaders and emergency managers to strengthen local safety programs, planning, education, and awareness. Actions for this component of the Storm Ready process would be to bring county and community officials and emergency managers together to inform them about the program and discuss the advantages of becoming "Storm Ready." This will also involve brainstorming ways to improve weather related hazard education and increase public awareness of the events.								
1-3	Weather Alert Radio System	Ongoing	High	High	As funding becomes available	All Hazards	Emergency services	1-3	To be determined
	The National Weather Service provides a weather forecast and warning radio system called the "Weather Alert Radio System." This action would provide weather alert radios to schools and other critical public facilities within the region for warning, education, and awareness purposes. This would involve coordinating with the National Weather Service to establish partnerships to provide weather radio access to these special facilities and then contacting the facility representatives to let them know that this weather alert system is available.								
1-7	Training on the importance of maintaining Right of Ways	Ongoing	Low	N/A	Removed.	All Hazards	Emergency services	1-7	Existing budgets
	Coordinate with VDOT and utility companies to sponsor educational programs on the importance of maintaining utilities and right of ways.								
2-1	Monitor Road Cleanup Following Hazard Events	Ongoing	Low	Low	ongoing	All Hazards	Public works	2-1	Federal Transportation Grants, Existing budgets
	Monitor the effectiveness of road cleanup procedures in counties and communities to ensure that primary and secondary roads are cleared in an efficient and timely manner.								
2-2	National Weather Service Storm Ready Data Collection	Ongoing	High	Medium	ongoing	All Hazards	Emergency services	2-2	NOAA; NWS, Existing Budgets
	To become a part of the Storm Ready network, a community must have the capability to monitor meteorological and hydrometeorological data and warn their citizens of imminent weather related hazards. This includes: warning reception devices such as the NOAA Weather Radio, Emergency Management Weather Information Network Receiver, access to weather Radar data, instrumentation to monitor local weather and hydrologic conditions, and warning media outlets (Radio, Television). This action will look into ways of attaining the required data and information outlets and the resources that need to be utilized or developed to facilitate these monitoring and communication processes. This action will also involve collecting and analyzing necessary information to develop and administer a formal hazardous weather operation plan.								
3-1	National Weather Service Storm Ready Operations Plan	Ongoing	High	High	Completed	All Hazards	Emergency services	3-1	NOAA; NWS, Existing Budgets
	There are population-based guidelines that a county or community must meet before it can be considered "Storm Ready," which are listed here: http://www.stormready.noaa.gov/guideline_chart.htm . Actions for this mitigation strategy include evaluating the current status of each locality that should be in the program to determine which guidelines are already met and develop ways of enhancing policies and resources available to the locality to reach all other necessary requirements and begin the Storm Ready application process. This action also involves developing a formal hazardous weather operation plan for each locality.								
3-3	Drought Mitigation - Voluntary restrictions	Ongoing	Low	N/A	Removed.	All Hazards	Emergency services	3-3	Virginia Department of Forestry; Existing Budgets
	Negotiate with irrigators to gain voluntary restrictions on irrigation in areas where domestic wells are likely to be affected, or suspend water use permits in watersheds with low water levels.								
3-5	Integrating Human Caused Hazards into EOPs	Ongoing	Medium	Medium	Completed	All Hazards	Emergency services	3-5	Community EOP Update Budget, VDEM and FEMA Planning Funding (PDM, HMGP)
	FEMA uses the term "Human-caused hazards" to address those hazards that are primarily due to the actions of people. This includes hazards of a chemical, biological, radiological, and explosive nature. Local community EOPs address these hazards at different levels. This proposed mitigation action would evaluate current EOPs for Region 2000 and determine if coverage of human-caused hazards is adequate or needs expansion.								

City of Lynchburg Proposed Mitigation Actions									
Strategy ID Number	Strategy Description	Status	Priority 2006	Priority 2013	Timeline	Hazard to be Mitigated	Lead Agency	Category (s)	Potential funding sources
4-1	Maintaining Critical Facilities during Power Disruptions	Ongoing	Medium	Medium	ongoing	All Hazards	Emergency services	4-1	VDEM and FEMA Planning Funds (PDM/HMGP) CIP Budgets
	During disasters, communities need the assurance that their critical facilities are able to stay in operation. Making buildings ready to receive generators and installing generators would allow critical facilities--i.e. water treatment facilities, hospitals, etc.--to maintain their operational status.								
4-3	Evaluate and establish adequate drainage systems	Ongoing	Medium	Medium	Ongoing	All Hazards	Public works	4-3	To be determined
	Assess methods of remediating water contamination in a timely manner by improving water treatment and distribution procedures and evaluating hazardous materials that can be deposited into drainage systems.								
4-7	Monitoring and Maintain areas near right of ways	Ongoing	Low	Low	Ongoing	All Hazards	Public works	4-7	VDOT, VDOF, Utility Companies, Existing Budgets
	Monitor the location of old, weak, or dying trees within the region that are near homes, public facilities, and other critical facilities and cut down any that are vulnerable to falling down during wind events.								
5-1	NFIP Participation and Education	Ongoing	High	High	As funding becomes available	Flood	Emergency services	5-1	Existing budgets
	Floodplain identification and Mapping: This item could include maintenance of publicly accessible copy of effective FIRM (flood insurance rate map) maps and FIS (flood insurance study), adopting the most current DFIRM or FIRM and FIS, Support of local requests for map updates, sharing with FEMA any new technical or scientific data that could result in map revisions within 6 months of creation or identification of new data, assisting with local floodplain determinations, and maintaining a record of approved Letters of Map Change.								
	Floodplain managements: Adopt a compliant floodplain management ordinance that at a minimim regulates the following: Adopt a compliant floodplain management ordinance that at a minimum regulates the following: <ul style="list-style-type: none"> • Issue permits for all proposed development in the SFHA • Obtain, review and utilize any Base Flood Elevation and floodway data, and require BFE data for subdivision proposals and other development proposals larger than 50 lots or 5 acres • Identify measures to keep all new and substantially improved construction reasonably safe from flooding to or above the Base Flood Elevation, including anchoring, using flood resistant materials, designing or locating utilities and service facilities to prevent water damage • Document and maintain records of elevation data that document lowest floor elevation for new or substantially improved structures. o Enforce the ordinance by monitoring compliance and taking remedial action to correct violations o Consider adoption of activities that extend beyond the minimum requirements, including those identified for participation in the Community Rating System, freeboard, prohibition of production or storage of chemicals in SFHA, prohibition of certain types of structures such as: hospitals, nursing homes, jails, prohibition of certain types of residential housing such as manufactured homes, and finally floodplain ordinances that prohibit any new residential or non-residential structures in the SFHA. 								
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Appendix 6.1

November 3, 2011

Meeting Agenda

Agenda
Region 2000 Hazard Mitigation Plan Update Process
Meeting #3: Mitigation Goals and Strategies
November 3, 2011
11:30-2:00

Region 2000 Partnership Offices
828 Main Street, 12th Floor
Lynchburg, VA 24504

- 1) Welcome and Introductions (11:30-11:45)**
- 2) Today's Agenda and Plan Purpose Review (11:45-12:00)**
- LUNCH is served
- 3) Identification of Mitigation Actions (12:15-12:45)**
- 4) Prioritization of Mitigation Actions (12:45-1:15)**
- 5) Plan Implementation and Maintenance (1:15-1:30)**
- 6) Mitigation Action Implementation Worksheets and Next Steps (1:30-2:00)**

Appendix 6.2

November 3, 2011

Meeting Minutes

Hazard Mitigation Goals and Strategies Meeting
November 3, 2011
Region 2000 Partnership Offices
828 Main St. 12th Floor
Lynchburg, VA 24504

Meeting minutes

Project management team signed in

Name	Jurisdiction
Kelvin Brown	Amherst, Town of
Freddie Godsey	Appomattox County
Roxanne Paulette	Appomattox, Town of
Seth Mowles	Bedford County
Tracy Fairchild	Campbell County
Dan Witt	Altavista, Town of
Mike Crews	Brookneal, Town of
Bill Aldridge	Lynchburg City
Philipp Gabathuler	Region 2000
Robbie Coates	VDEM

- Welcome and Introductions / Opening Remarks
- Mitigation action worksheet was handed out.
- Robbie Coates thanked everyone for attending the meeting
- Project management team went around and introduced themselves and what they hoped to get out of the meeting.

- Review Planning Process

Subject Matter Expert, Deepa Srinivasan, provided a review on the plan revision process

- Basic Elements of Hazard Mitigation were reviewed by the VDEM representative, Robbie Coates.
- Definition : sustained action taken to reduce or eliminate long-term risk to people and property from hazards

Short Description on the History of Hazard Mitigation given by Robbie Coates

- Plan establishes eligibility for grant funding (ie. Pre-Disaster Mitigation Funding, Hazard Mitigation Grant Program Funding)

Review plan goals and objectives

Project management team agreed that the goals from the 2006 plan were still viable.

- Review Table of Content of the plan

Conclusion and thanks

Section VIII

Appendix

References



Appendix 8.1

References

Flooding – DFIRM / National Flood Hazard Layer – FEMA Map Service Center

Advanced Hydrological Prediction Center –river gauges and historical crests

www.weather.gov/ahps2/crests.php

USGS Water – watersheds – <http://water.usgs.gov>

VIPER – Virginia Interoperability Picture for Emergency Response

https://cop.vdem.virginia.gov/viper_secure?Default.aspx# - displays example of river gauges vs floodplain overlays

Road Center Line Data – <http://gisdata.virginia.gov> – VGIN Hosted Downloads – VGIN Road Centerline (RCL), state police, VSP Offices, VDH Hospitals. NHD – hydrology layer, 2002 VBMP TINs – elevation data set with pretty good resolution.

Office of Licensures and Certification – VDH – Health Clinics

<http://gismaps.virginia.gov/contacts> - primary points of contact for GIS data for each county

<http://www.vita.virginia.gov/isp> - Click Geospatial Events and Activities, Local Government – lists all counties and whether or not they have a GIS page and their links

address points – vgin is working with 911 or gis, if county doesn't have gis, they would still have 911 address points from their CAD systems (all but 6 counties statewide have this) – shape file – in my flood zones, show me where I have address points within the flood zones.

Wildfire

Risk Assessment Maps – <http://www.dof.virginia.gov/gis> - click DATA AVAILABLE

Tornado, Hail, Wind

<http://www.spc.noaa.gov/gis/svrgis>

Hurricane Tracks - historical

<http://csc-s-maps-g.csc.noaa.gov/hurricanes/> - NOAA Coastal Service Center

Earthquake – need to get link for shapefiles for fault zones

Extreme Temperatures –

<http://www.vdem.state.va.us/newsroom/history/winter.cfm>

Winter Weather –

<http://www7.ncdc.noaa.gov/IPS/coop> - individual COOP station data